The Study of the Application of Alternative Dispute Resolution (ADR) methods for Settlement of Environmental Disputes in Sri Lanka

Sakunthala Gayani Hewawasan

(158812C)

Degree of Master of Science in Project Management

Department of Building Economics

University of Moratuwa
Sri Lanka

August 2020

The Study of the Application of Alternative Dispute Resolution (ADR) methods for Settlement of Environmental Disputes in Sri Lanka

Sakunthala Gayani Hewawasan

(158812C)

Thesis/Dissertation submitted in partial fulfillment of the requirements for the degree of Master of Science in Project Management

Department of Building Economics

University of Moratuwa
Sri Lanka

August 2020

Declaration

I declare that this is my own work and this dissertation does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning to the best of my knowledge and belief it does not contain any material previously published written by another person except where the acknowledgment is made in the text.

Also, I hereby grant the University of Moratuwa the non-exclusive right to reproduce and distribute my dissertation, in whole or in part in print, electronic or other medium. I retain the right to use this content in whole or in part in future work (such as articles or books).

Signature: Date:

The above candidate has carried out research for the Masters Dissertation under my supervision.

Name of supervisor: Mr. Mahesh Abeynayake (Attorney-at-Law)

Signature: Date:

Abstract

In Sri Lanka rapid development processes and accelerated development have caused environmental issues which have led to environmental disputes. Currently environmental disputes are resolved through Litigation. However, a majority of these cases are settled in Courts, creating an outcome of one party benefiting at the expense of other. Resorting litigation to resolve environmental disputes create a disadvantage for development due to the laws' delays and high costs. Globally, there is an increase in the use of Alternative Dispute Resolution (ADR) in settling environmental disputes. The primary objective of this research is to study the application of ADR methods in settling environmental disputes in Sri Lanka. The approaches chosen for this research were interpretivism and phenomological and makes use of a combination of primary and secondary data sources as research method. Since this research requires scrutinizing of case law and juristic writings, secondary data sources were used along with primary data sources of interviews and questionnaires. The interviews were conducted with a number of individuals with extensive lived in experience with environmental dispute resolution and was complemented by a questionnaire which was distributed among a composition of individuals with similar experiences. Data from archival and secondary sources were analyzed as skimming, reading and interpretation. The results of the interviews and the questionnaire were analyzed manually, where the researcher aimed to distinguish common words and phrases, to be able to determine tendencies and predispositions in the answers of the respondents. The findings of the research confirmed the existence of environmental disputes and that the common dispute resolution method used in Sri Lanka is litigation. Also, there is evidence that ADR methods are used globally to successfully settle such disputes and there are no barriers to incorporating ADR method for environmental dispute resolution in Sri Lanka. Based on the findings it is recommended to propose the establishment of a Statutory Tribunal for the existing environmental disputes with a mandate to hear specifically environmental disputes and the incorporation of Environmental Mediation as an environmental dispute resolution method at the different stages of a project cycle of a development project in order to resolve environmental disputes at strategic points of the project cycle where both parties have a win-win situation, in safeguarding the environment as well as successfully implement development projects.

Keywords: *Environmental Disputes, Environmental Dispute Resolution, Alternative Dispute Resolution*

Acknowledgement

I would like to express my sincere gratitude to the University of Moratuwa for the invaluable opportunity given to me to follow this resourceful Masters' Degree Course on Project Management. I am grateful to the Senior Academic Staff of the Department of Building Economics, University of Moratuwa for providing me with valuable guidance in this process as well as for making this MSc. Programme both interesting and enriching.

I am especially thankful to my supervision, Senior Lecturer of the Department of Building Economics, University of Moratuwa, Mr. Mahesh Abeynayake (Attorney-at-Law) for his impeccable guidance and meticulous supervision in facilitating the completing of this dissertation.

I also wish to express my gratitude to Senior Counsels (Attorneys-at-Law) Mr. Uditha Egalahewa PC and Mr. Anandalal Nanayakkara whose vast experience guided me in my research on environmental law and its applicability. My sincere gratitude to Ms. Chamila Weerathunghe, National Project Coordinator (Watershed Management Project) at ILO, former Chief Operations Officer of the Environmental Foundation (Guarantee) Limited (EFL) for all her support and encouragement, Dr. Shamen Vidanage, Senior Lecturer, University of Kelaniya, former Programme Coordinator of International Union for Conservation of Nature (IUCN) Sri Lanka for the mentoring and encouraging me by providing me with the professional space to engage this research at IUCN. My sincere gratitude to all my fellow MSc. Students for their generous support and constant encouragement. I thank Ms. Lakshmi Siriwardena for providing us with Administrative support during the course of this study.

I am also extremely grateful to my family for supporting and encouraging me to complete this dissertation.

Sakunthala Gayani Hewawasan
(158812C)
August 2020

Table of Contents

CHAPTER 01

INTRODUCTION TO RESEARCH

1.1 Background

Environmental law and development are two areas of competing interests where disputes are inevitable. Lawson (2019) states that these issues need immediate attention and proactive action on our part to ensure conservation of the only habitable planet which we call our home. Susskind and Weinstein (1980) states the interest of the environmental and developmental are locked in a fierce and widening battle. They go on to state that the number and intensity of environmental disputes (use of natural resources or the choice of appropriate standards for environmental protection are involved) have been growing, the ability of our social, political, and legal institutions to resolve these disputes in a timely, efficient, and decisive manner has diminished and that disputes among groups with conflicting values are prevalent.

Environmental issues in a global context broadly varies from global warming and climate change, water pollution and ocean acidification as well as loss of biodiversity. While the list of issues relating to our environment can be more extensive, Lawson (2019) complies these three major ones as affecting the majority of them, and how focusing attention on these three major themes will have a ripple effect on lesser environmental issues. According to Diekmann and Franzen (2018), an individuals' awareness that the state of the environment is threatened by human-inflicted resource depletion and pollution is considered as an environmental concern. These authors have conducted a survey collecting individual data in several countries at yearly intervals on rotating topics of interest. In 1993, 2000 and 2010 the survey focused on environmental issues. In the latest survey from 2010, data was collected from random population samples in 32 countries using mostly a written questionnaire delivered after the respondent's participation in an unrelated face-to-face or telephone interview. Although this study focused primarily on the relationship between a nation's wealth and its public's degree of environmental concern by analyzing data from the International Social Survey Program (ISSP), this also provided a very basic overview of the extent

of environmental concerns globally. For example, the United States recorded 1430 cases, Canada 985 cases, New Zealand 1172 cases, Great Britain 928 cases and South Africa 3112. The survey did not have record of Asian countries. In this context, researcher focused on India as an Asian country plagued with environmental issues. As Sengupta and Pandey (2020) revealed in an article, the National Crimes Records Bureau of India released in 2020 recorded 79,511 environmental cases which are already in courts.

In the local context, the EFL (2009) published a handbook on environmental law for the judiciary with the auspice of the United Nations Environmental Programme (UNEP) and describes, *inter alia*, a variety of environmental issues in Sri Lanka. These also can be categorized into the major areas of pollution and degradation. Issues varying from air, water, soil and noise pollution, natural resource management issues relating to extraction and exploitation, energy generation, waste management, natural disasters and biodiversity loss, all of which contribute to the degradation of the environment. Environmental degradation is a culmination of these identified challenges and refers to the depletion of potentially renewable resources by utilizing it faster that it is naturally replenished. De Mel and Sirimanne (EFL, 2009) identifies different forces as contributing to environmental degradation. These include direct destruction by people and businesses as well as wider institutional, policy and legal factors. Add to this weak enforcement of environmental laws together with the failure of relevant mandated authorities to carry out their duties, intensify degradation. EFL (2018) identifies that a combination of changes in consumption patterns and demands, increasing market integration and globalization, land pressure and population growth all have an impact on the environment. Global and national pressures often encourage “development” to be carried out in environmentally unsustainable ways.

Due to the rapid and unplanned urbanization, it is important to avoid adverse effects on the environment during development. Sustainable Development is an environmental principle which according to the Brundtland Commission, means "development that meets the need of the present generation without harming future generations to meet their needs" (Brundtland Report, 1987). The rapid development has generated a demand

for the use of natural resources and causing degradation of the same. (Carvalho and Fidélis, 2011). Industrial activities also contribute greatly to the environment pollution (Gannon, 2005). As UNEP (1982) reports stated that "rapport between man and environment is interdependent, so that whatever the changes he introduces to environment on behalf of his own benefit, that returns and effects against his convenience and health".

Sri Lanka has also been experiencing expedited development and the dependency on private sector-based development has been increasing in the recent past. The use of natural resources in development creates a dispute between the successful implementation of the project and maintaining environmental sustainability. Consequently, where there is a dispute, a mechanism to settle the dispute is required. Harvard Law School Program on Negotiation describes dispute resolutions strategies as a multistep process that can start with negotiation, move on to mediation, and, if necessary, end in arbitration or litigation. This progression allows parties to start off, quite naturally, with less-expensive, less-formal procedures before making bigger commitments of money and time. Many countries including United States, Germany, and Netherlands have strengthened their legal systems to make the protection of environment as a social concern through reinforcement of statutory law (Posting Altman, 1994). Sri Lanka too has established a comprehensive legal framework with laws, regulations and regulatory bodies to implement these. Environmental law consists of a body of complex interlocking rules, agreements and treaties that operate to regulate the interaction of humanity and the rest of the natural or physical environment. The enforcement of these laws and regulations are vested on the judiciary (courts) which are called to make decisions on areas of environmental disputes. During the Third South Asia Judicial Roundtable on Environmental Justice for Sustainable Green Development in Sri Lanka in 2015, Asia Development Bank presented that environmental dispute resolution method in Sri Lanka is often litigation, with limitations on the rules of evidence. In this context the proceedings state that in environmental disputes resolution, parties should try to resolve disputes at the earliest possible opportunity and where private decision-making through informal discussions and problem solving, negotiations, and mediation can help end a conflict (Ahsan and Bueta 2014). It was

emphasized that “one size fits all” approach of litigation could very well fail to take into consideration vital local needs and objectives that can be addressed in an alternative dispute resolution (ADR) method. ADR maintains a broader perspective on environmental systems which are not restricted to a single parcel of land or a particular project. ADR methods are forms or procedures, be it formal or informal, where parties are able to resolve their disputes outside of litigation before court of law (Wimalachandra, 2007).

1.2 Research Problem

Adverse impacts of development projects on the environment and the people have been a common cause of environment related disputes in Sri Lanka and these have been resolved mostly through the traditional and adversarial method of litigation. However, the effectiveness of litigation in settling environmental disputes is limited to the interest of one party/parties prevailing at the expense of the others. A different intervention method that can bring a settlement balancing the interests of all parties need to be identified. The problem question is “can alternative dispute resolution methods be used to settle environmental disputes in Sri Lanka”?

1.3 Aim

The aim of this research is to examine the applicability of alternative dispute resolution methods for settlement of environmental disputes in Sri Lanka. In order to answer the problem question, the following objectives were identified.

1.4 Research Objectives

- To identify the underlying causes of environmental disputes in Sri Lanka,
- To assess the effectiveness of dispute resolutions methods used to settle such environmental disputes in Sri Lanka,
- To confirm the applicability of alternative dispute resolution methods for environmental disputes in Sri Lanka,
- To propose recommendations to improve dispute resolution mechanism for settlement of environmental disputes in Sri Lanka.

1.5 Research Methodology

This dissertation makes use of qualitative research strategy, where the research approach implemented is of interpretivism and phenomological approaches, because the connection between several different variables had to be established through interpretation. Also, the research makes use of triangulation, which is the use of multiple methods or data sources. This study used a combination of primary and secondary data sources as research method. Since this research requires an analysis of case law and juristic writings, the researcher used secondary data sources along with primary data sources of interviews and questionnaires. The interviews were conducted with a number of individuals with extensive lived in experience with environmental dispute resolution. As a complementary method, questionnaire was distributed among a composition of environmental law practitioners, legal experts, international conservation experts, environmental activists, experts from development sector and regulatory authorities.

1.6 Sampling Strategy.

For the purposes of collecting primary data for this study, the researcher chose to examine individuals who were specifically involved in the resolution of environmental dispute in Sri Lanka as well as engaging in managing such disputes within the legal norms. In order to collect data from interviews, the researcher selected a small sample with extensive experience in engaging environmental dispute resolution in Sri Lanka. As interpretative phenomenological analysis (IPA) was chosen in order to study in-depth the lived experiences of these individuals, this was expected to capture as closely as possible the way the phenomenon is experienced by the individual. For the questionnaires a slightly larger group was targeted. This group consisted of individuals who were a composition of environmental law practitioners, legal experts, international conservation experts, environmental activists, experts from development sector and regulatory authorities. The justification and further elaborations are found in the Methodology Chapter of this dissertation.

1.7 Data Collecting Methods.

Secondary Data Sources

In this research the author used published information available from sources that were identified during the literature review. As this research looked at environmental disputes and dispute resolution in Sri Lanka, time constraints did not permit primary investigation and data collection from all possible sources. However, secondary data was readily available and was easily accessible for this research.

Interviews

The researcher chose semi-structured interviews consisting of several questions and were conducted with a number of individuals (who had extensive lived in experience with environmental dispute resolution), in order to cover more abstract aspects of the research.

Questionnaire Survey

Questionnaires were chosen as a complementary data collection method for this research because this allowed the researcher an efficient and timely method to collect information from multiple respondents in a short period.

1.8 Limitations of the Study

The intent of this research is to determine whether Alternative Dispute Resolution (ADR) methods can be engaged to settle environmental disputes to prevent infringement environment rights of environment rights of citizens while successfully implementing development projects in Sri Lanka. Therefore, this study is limited to;

1) **Limited to Environmental disputes**

   This research is limited to the disputes in relation to disputes relating to environmental impacts as such and does not explore the various other disputes that would undoubtedly arise in the process of development.

2) **The scope is restricted to the resolution of environmental disputes in Sri Lanka.**

The research is limited to the environmental dispute resolution methods and does not focus on exploring the solutions for the prevention of environmental disputes that occur in a wider context in development.

1.9 Chapter Breakdown

This research consists of five chapters constructed on the segments and the consequences of the research carried out. Chapter one consists of the introduction and background to the research study and the research problem with a rationale. Chapter two contains the literature review on the previous related works carried out and represents relevant information for understanding the study more. Chapter three explains the details of the selected methodology that was used in reaching the objectives of the research. Chapter four presents the data and information collected using the selected methodology and the analysis of findings. In conclusions, Chapter five discusses the conclusions, recommendations and future works to improve this study.

CHAPTER 02

LITERATURE REVIEW

2.1 Introduction

Environment and development has always been viewed as being two sides of the same coin in the past before the concept of Sustainable Development was introduced to the world when the International Union for the Conservation of Nature (IUCN) published, in 1980, a World Conservation Strategy that included “one of the first references to sustainable development as a global priority and introduced the term Sustainable Development" (Sachs & Jeffrey, 2015). Susskind and Weinstein (1980) states that attempts to promote economic development or technological innovation is viewed as a potential insult to the quality of the natural environment or a threat to the delicate "ecological balance" upon which we all depend. And that the interest of the environmental and developmental are locked in a fierce and widening battle.

As far back as in the seventies, scholars such as Broder (1979) and Horowitz (1977) have seen the Governments as seemingly “unable to address such disputes satisfactorily, in part because government itself is often a party to them, but primarily because the vitality of political institutions has been exhausted by the fragmentation of political parties into shifting alliances that do not so much govern as react to the pressures of special interest groups and other organized constituencies”. As Horowitz states, “the resulting paralysis in government, has placed an enormous burden on our legal system; a burden that, in the view of many qualified observers, the courts may not be able to handle”. It is in this context the authors go on to evaluate new approaches to resolving environmental disputes, in addition to traditional legal or political devices, for resolving conflict. This process was called environmental dispute resolution, conflict avoidance, mediation, or just plain negotiation and these shared a critical element. This is that each approach aimed to resolve environmental disputes through out-of-court bargaining rather than through adversarial legal procedures. All of these approaches sought to manage conflict and to foster voluntary agreements.

2.2 Environmental Disputes

Definitions

Environmental disputes are defined in the literature in a number of different ways. Christopher Moore (1986) defines environmental disputes as "...tensions, disagreements, altercations, debates, competitions, contests, conflicts, or fights over some element of the natural environment." Blackburn and Bruce (1995) define "environmental conflict" as being caused "...when one or more parties involved in a decision-making process disagree about an action which has potential to have an impact upon the environment." Susskind and Secunda (1998) states that environmental disputes are "...disagreements among stakeholders in a range of public disputes which involve environmental quality or natural resource management." Bingham (1986), in her review of a 'decade of experience' in resolving environmental disputes, does not define "environmental dispute" but categorizes the disputes revised into six broad categories: land use, natural resource management and use of public lands, water resources, energy, air quality and toxics, which she further subdivides into 'site-specific' and general policy categories. A dispute according to West's Encyclopedia of American Law (2008) is defined as a "conflict or controversy; a conflict of claims or rights; an assertion of a right, claim, or demand on one side, met by contrary claims or allegation on the other".

For our purposes we shall limit the scope of both "environmental" and "dispute", so as to more clearly define our research focus. Therefore, what this research refers to as a "dispute" is better understood by considering a range of definitions. Christopher Moore's definition quoted in the above paragraphs is a wide one surrounding conflicts of relatively any nature. Yet distinctively, Brown and Marriot (1999) defines disputes as "...a class or kind of conflict which manifests itself in distinct, justiciable issues". Similarly, Crowfoot and Wondolleck (1990) states that a dispute differs from a conflict in a way that "dispute is a specific conflict episode that is a part of a continual and larger societal conflict". Yet, they differentiated the specific nature of a "dispute" from the more general, non-specific nature of "conflict", which they describe as "...the fundamental and ongoing differences, opposition, and sometimes coercion among major groups in society over their values and behaviours toward the natural

environment". And a "dispute" is not distinct from the conflict process, but rather it is a specific, identifiable part of it, namely a "specific conflict episode that is part of a continual and larger societal conflict". Also, this research focus on the "environment" has been narrowed from the expansive concept that might imply any component of the natural environment including problems of natural resource management, energy generation, development, industrialization. Of course, the term "environmental" may even be considered to extend beyond the natural environment to encompass aspects of the man-made or built environment, as in the case of heritage conservation or "environment" as it is used in the context of planning law. Similarly, Guy Burgess and Heidi Burgess (1995) also characterizes environmental conflict as centring on entrenched, long-term differences between opposing groups' underlying values and beliefs on the proper relationship between human society and the natural environment. Environmental conflict, as defined in these forms, is largely value-based and group-centred in nature, and thus less disposed to resolution. On the contrary disputes are categorized more by their specificness, which finally makes them more disposed to adjudication and resolution. W. Felsteiner, R. Abel and A. Sarat (1980) have categorized the development of a dispute includes three stages: 'naming, blaming and claiming'. 'Naming' involves the identification of a particular experience as injurious. 'Blaming' involves the attribution of that injury to the fault of another individual or social entity, whilst the third stage, 'claiming', occurs when a remedy is claimed from the person or entity believed to be responsible for the injury. Finally, a claim is transformed into a dispute when it is wholly or partly rejected (Felsteiner, Abel and Sarat 1980). Therefore, it is the explicit and exclusive nature of a dispute, positioning upon a particular claim, which make it actionable and more agreeable to resolution methods such as litigation or mediation. According to G. Burgess and H. Burgess (1995) there is a close association between environmental conflicts and disputes. Value- or interest-based conflicts between groups in society, which are broader, may contribute to a form of ongoing disputes that are in relation to more specific circumstances, claims or policies. Although individual disputes may well be prone to resolution, yet the more general and long drawn process of environmental conflict is likely to continue through successive disputes.

However, this research is limited to environmental disputes and their resolution and does not extend to an exploration of their backgrounds or the broader processes of environmental conflict that may cause them.

Global Context

Susskind and Weinstein as far back as 1980 observes that the number and intensity of environmental disputes where the use of natural resources or the appropriate standards for environmental protection are involved, have been growing, the ability of our social, political, and legal institutions to resolve these disputes in a timely, efficient, and decisive manner has diminished. In a number of countries environmental issues were susceptible to be resolved through litigation. To better understand the existence of environmental issues relating to development in a country, the researcher looked at a few countries such as India, Canada, USA and Europe.

India

In India, Sengupta and Pandey (2020) revealed in an article on the Report *Down To Earth's State of India's Environment 2020: In Figures* (released on June 4, 2020), that the toll of environmental cases that have been pending in court in the past year is 79,511 with 45,008 cases being filed at the start of 2018 alone and 34,503 cases being filed by the end of the year. Chandappa and Ravi (2009) identifies forest and agricultural degradation of land, resource depletion (such as water, mineral, forest, sand, and rocks), environmental degradation, public health, loss of biodiversity, loss of resilience in ecosystems, livelihood security for the poor as major environmental issues in India. A number of studies and literature has depicted human induced activities such as rapid burning of fuelwood and biomass such as dried waste from livestock as the primary source of energy, lack of organised garbage and waste removal services, lack of sewage treatment operations, lack of flood control and monsoon water drainage system, diversion of consumer waste into rivers, cremation practices near major rivers, government mandated protection of highly polluting old public transport, and continued operation by Indian government of government-owned, high emission plants built between 1950 and 1980 have been identified as major source of pollution in India (Kandlikar & Ramachandran, 2000; Tockner & Stanford 2002; Hamner, Tripathi,

Mishra, et al. 2006; Sushil & Batra 2006). India: Country Strategy paper, 2007–2013, reiterates that air pollution, poor management of waste, growing water scarcity, falling groundwater tables, water pollution, preservation and quality of forests, biodiversity loss, and land/soil degradation are some of the major environmental issues India faces today. Chabukdhara et al. (2016) emphasizes that the growth in India's population adds pressure to environmental issues and its resources. Rapid urbanization has caused a buildup of heavy metals in the soil of the city of Ghaziabad, and these metals are being ingested through contaminated vegetables. Heavy metals are hazardous to people's health and are known carcinogens (Chabukdhara & Nema 2012; Chabukdharaet al., 2016).

Canada

In Canada, a public interest litigation group, Ecojustice, alone has encountered 94 cases up to date with issues such as Canada's Oilsands, Pipelines, Coal Exports, Mining, Dams and Salmon Farming etc., continue to be the base of environmental disputes. The Sabin Center for Climate Change Law of the Columbia Law School along with the Columbia University's Earth Institute lists 348 cases against government ranging from GHG emissions reduction and trading (121 Cases), Access to information (11 Cases), Environmental assessment and permitting (162 Cases), Human Rights (36 Cases), Failure to adapt (1 Case), Protecting biodiversity and ecosystems (12 Cases), Public Trust (5 Cases). Also, they list 44 cases against corporations and individuals with 36 cases againt corporations and 8 cases protestors, all relating to environmental disputes. As Brett (2019) states, the Arctic is warming faster than any other biome in recent times, and the Government of Canadian is particularly concerned about the impacts of climate change. The country produces vast wealth from its oil and gas operations. Yet, oil and gas industries account for a quarter of Canada's greenhouse gas emissions, with the oilsands being the most carbon intensive. The oil removed in Alberta's oilsands reserves is shipped in pipelines in its bitumen raw form. Also, a large amount of the Canadian population lives in urban areas and the air in these cities are notoriously poor in quality. Similarly, Canada has an abundance of freshwater, but the World Wildlife Fund (WWF) raises the concern about water usage and the damming of Canadian rivers. The WWF notes that Canada uses large amounts of water for agriculture, industry and

consumption, moving more water from one watershed to another than any other country in the world and this activity can be devastating to ecosystems.

USA

The State Energy & Environmental Impact Center at NYU Law ("State Impact Center") has been instrumental in supporting state attorneys general in defending and promoting clean energy, climate and environmental laws and policies in the United States. The Center emphasizes environmental issues faced by the US as wide ranging as clean air, clean energy and energy efficiency, environmental justice (public interest litigation), public lands and wildlife related. As far back as 1963, the Congress had formulated laws to ensure that all Americans breathe clean, healthy air and are shielded from airborne pollutants that pose a serious threat to public health. As the State Impact Center states, over the past 40 years, significant progress has been made in addressing air pollution, but major challenges remain. A number of communities around the US – often populated by disadvantaged residents – continue to be exposed to poor air quality and suffer from excessively high rates of cancer, respiratory diseases and asthma. In addition, the Environmental Protection Agency (EPA) has only begun to apply Clean Air Act obligations passed in 1963 to sources of greenhouse gases that are causing the scourge of climate change. Further to this in 2017, the federal states have come across situations where the government has made multiple attempts to override state clean energy and energy efficiency policies. In the area of public interest litigation, State Impact Center identifies that the low-income communities and communities of color across the country suffer some of the worst and most persistent environmental problems. Issues like coal-burning power plants that emit nitrogen oxides and volatile organic compounds that react to produce high-levels of ozone-causing smog are disproportionally located in these communities. As a result, these communities often suffer from higher rates of asthma and other adverse health effects. Likewise, poorer communities and communities of color often drink contaminated water – the result of industrial dumping of pollutants and toxicants near or in bodies of water and the failure to invest in infrastructure to treat and clean dirty water. As far as wildlife is concerned State Impact Center states that from the bald eagle to the grizzly bear to the American alligator, numerous iconic North American wildlife species have been saved from

extinction through a combination of effective habitat preservation and strong conservation measures. Landmark federal laws, including the Endangered Species Act (ESA) and the Migratory Bird Treaty Act (MBTA), have played a critical role in these victories for biodiversity. Even so, habitat loss, overharvesting and other human-caused stresses continue to threaten wildlife populations across the United States. At a time when wildlife protections are more vital than ever, the current administration is actively undermining longstanding statues that have proven extremely effective. Although up to date 146 cases relating to environmental disputes that are record on Wikipedia as significant environment dispute cases in the United States, it could be that these numbers exceed the recorded cases even though access to such statistics were not available to this research.

Europe

Andersson, Bennekou & Schroll (1992) had identified, energy production/acid rain, nuclear power/waste, air pollution/climate, heavy metals, pesticides, water pollution, solid waste, and unforeseen accidents as main environmental problems in Europe. The European Environment Agency (2020) reiterates this by identifying that climate change, Stratospheric ozone depletion, The loss of biodiversity, Major accidents, Acidification, Tropospheric ozone and other photochemical oxidants, The management of freshwater resources, Forest degradation, Coastal zone threats and management, Waste production and management, Urban stress and Chemical risk are some of the main environmental issues faced by Europe. Neslen (2018) states that while air pollution is now "the biggest environmental risk" to public health in Europe, governments are failing to adequately deal with the crisis as the EU Court of Auditors has found. He goes on to state that Europe's air pollution limits are "much weaker" than WHO guidelines – and most EU countries do not comply with them anyway, according to the damning new report. Also, that toxic air kills an estimated 400,000 Europeans before their time each year – up to 40,000 of them in Britain. But the UK government has been in breach of EU air quality limits since 2010 and now faces multimillion-pound fines at the European court. The European Commission has been taking action against EU countries breaching EU environment law and lists 229 of these infringement cases as ongoing since 2010 to date.

National Context

In the local context, the EFL (2009) published a handbook on environmental law for the judiciary with the auspice of the United Nations Environmental Programme (UNEP) and describes, *inter alia*, a variety of environmental issues in Sri Lanka. These also can be categorized into the major areas of pollution and degradation. Issues varying from air, water, soil and noise pollution, natural resource management issues relating to extraction and exploitation, energy generation, waste management, natural disasters and biodiversity loss, all of which contribute to the degradation of the environment. Environmental degradation is a culmination of these identified challenges and refers to the depletion of potentially renewable resources by utilizing it faster that it is naturally replenished. De Mel and Sirimanne (EFL, 2009) identifies different forces as contributing to environmental degradation. These include direct destruction by people and businesses as well as wider institutional, policy and legal factors. Add to this weak enforcement of environmental laws together with the failure of relevant mandated authorities to carry out their duties, intensify degradation. EFL (2018) identifies that a combination of changes in consumption patterns and demands, increasing market integration and globalization, land pressure and population growth all have an impact on the environment. Global and national pressures often encourage "development" to be carried out in environmentally unsustainable ways. Similarly, the Ministry of Environment and Wildlife Resource of Sri Lanka identifies the following as environmental challenges in Sri Lanka;

- Improper Land Use Planning,
- Depreciation of Forest Cover (Deforestation),
- Land Degradation (Soil Erosion, River Sedimentation; Desertification,),
- Scarcity of Drinking Water to the Community,
- Environmental Pollution (Air, Water & Soil),
- Loss of Biodiversity (Degradation and loss of Habitats),
- Ozone Layer Depletion,
- Green House Gas Emission and Climate Change,
- Environmental & Natural Disaster and Earth Slides,

- Lack of Proper Recognition of Environmental Values in Environmental Accounting,
- Increasing threat to endangered species,
- Encroachment of Critical Areas,
- Unsustainable Management of Natural Resources,
- Unsustainable Development Activities (Unsuitable Agriculture Expansion and Settlements),
- Exploitation of sea coral reef and inland earth mining,
- Uncontrolled Mining of Sand and other Minerals,
- Spread of Alien/ Invasive Species,
- Introduction of Genetically Modified Organisms,
- Solid, Hazardous and Industrial Waste generation,
- Health Hazards Related to Environment Pollution,
- Wildlife Depletion,
- Coastal Erosion, and
- Conservation of Micro ecosystems.

In Sri Lanka, human induced activities have caused a wide range of environmental issues, including flooding and landslides caused by deforestation, the overexploitation of natural resources, wildlife poaching and illegal logging in forest and wildlife reserves, industrial pollution of soil, water and air. Within such environmental issues is a multitude of interconnected societal disputes involving communities, corporates, government agencies, environmental organizations and countless other entities, each with their own views, interests and agenda. These disputes, if left unresolved, could escalate into wider social conflict and aggravate environmental degradation (EFL, 2009).

In Sri Lanka environmental issues have ranged from large-scale logging of forests and degradation of mangroves, coral reefs as well as pollution of air, water and soil. Insufficient waste management, especially in rural areas, leads to environmental pollution. Sri Lanka is also vulnerable to climate change impacts such as extreme

weather events and sea level rise. Growing industrialization and population are major causes of these environmental issues as well as the lack of public awareness and governmental guidelines intensify the problems (Lareef 2001).

According to Geekiyanage, Vithanage, Wijesekara, & Pushpakumara (2015) the Ministry of Environment had identified land degradation due to soil erosion, depletion of coastal resources, loss of biodiversity, waste disposal and inland water pollution as key environmental issues in Sri Lanka (MERE 2010). MERE (Ministry of Environment which was Environment and Renewable Energy at that time) and UNEP (2008) also draws attention to key environmental concerns under seven broad categories such as urbanization, management of solid waste, biodiversity conservation, land degradation, freshwater and marine resources, abatement of air and noise pollution, and energy conservation. MERE and UNEP (2009) further highlights, *inter alia*, that access to safe drinking water, basic sanitation, improving waste management are the primary considerations of the Sri Lankan government. DMC and UNEP (2009) also stated that the environmental safety issues are increasing due to increasing vulnerability to landslides in the central highlands of the country (DMC and UNDP, 2009). This is considered as Sri Lanka is in a transition from being an agricultural to becoming an industrial economy, which would cause the country to face many production-related environmental issues in the future.

2.3 Environmental Disputes Resolution

2.3.1 Dispute Resolution – General Overview

Dispute resolution is the process of resolving disputes between parties. The term dispute resolution is sometimes used interchangeably with conflict resolution, although conflicts are generally more deep-rooted and lengthier than disputes (Burton 1990). Dispute resolution techniques assist the resolution of antagonisms between parties that can include citizens, corporations, and governments. Methods of dispute resolution include:

- Litigation
- Arbitration

- Conciliation
- Mediation
- Negotiation
- Hybrid processes

Dispute resolution processes fall into two major categories:

1. Adjudicative processes, such as litigation or arbitration, in which a judge, jury or arbitrator determines the outcome.
2. Consensual processes, such as collaborative law, mediation, conciliation, or negotiation, in which the parties attempt to reach agreement.

The most common form of legal dispute resolution is litigation. Litigation is introduced when one party files suit against another. In Sri Lanka, litigation is facilitated by the government within the Judicial branch. The proceedings are very formal and are governed by rules of evidence and procedure, which are passed by the legislative branch of government. The decisions are made by an impartial judge, based on the factual questions of the case and the applicable law. The judgement of the court is not advisory but is binding with the right to appeal to a higher court. Litigation is adversarial by nature and involves hostile parties with opposing interests looking for a result that is in their own best interest. Lieberman & Henry (1986) states that because of the antagonistic nature of litigation, people often opt for solving disputes privately. Indeed, the involvement of lawyers does not always signal the end of a collaborative relationship.

Litigation follows the method of determining rights, obligations, and liabilities through the Court through law suits. Litigation is a time consuming and costly method, even with its legal benefits in settling disputes. In litigation, parties to the dispute are not given the opportunity to effectively contributions and participation in the dispute settlement. They are able to only observe and accept the decisions of the court. The duration of the exchange or the familiarity with exchange partners are important factors impacting the willingness of the firm to resolve disputes. Such impact is contingent on whether a cooperative norm has been developed through the course of the collaboration.

Retired judges or private lawyers often become arbitrators or mediators; however, trained and qualified non-legal dispute resolution specialists form a growing body within the field of alternative dispute resolution (ADR). In the United States, many states now have mediation or other ADR programs annexed to the courts, to facilitate settlement of lawsuits.

2.4 Alternative Dispute Resolution Methods – General Overview

Alternative Dispute Resolution (ADR) models which signifies practical and adaptable models of dispute resolution is discussed as alternatives to Litigation, which is one of the most popular methods applied for dispute resolution. Therefore, this section briefly discusses these alternative models of resolving disputes/conflicts, such as arbitration, mediation, negotiation, and conciliation as opposed to litigation. Alternative Dispute Resolution (ADR) is the realistic method of settling disputes in general which are inherent in socio-human relations. The principle of ADR models is to work towards achieving preventive strategic goals (Nowakowski, 2009) depending on the situation and magnitude of the dispute. Litigation rarely provides for the resolution of persistent dispute which creates animosity and disagreements which are internalized through biased socialization (Gbenda, 2009). The strategic goals of alternative dispute resolution (ADR) are, briefly, as follows;

- Dispute Prevention: This contains taking proactive measures marked at deterring the development of potential conflicts or disputes. Dispute prevention is a positive strategy for dispute resolution.
- Dispute Resolution: This comprises of the active involvement in settle an existing dispute, including making a decision on the suitable dispute resolution (ADR) model to be adopted in settling disputes.
- Dispute Management: This comprises of an intervention programme to manage disputes. Dispute management encircles dispute prevention, and dispute resolution, making it an entrenched policy, which can easily be referred to when there is the need for dispute resolution.

Various paradigms of settling disputes are available and alternative methods are usually accepted as negotiation, mediation, arbitration, conciliation, and hybrid processes. The selection of any of these models depends on the nature of the dispute, and the expected outcomes from the process. They are discussed briefly below;

Negotiation

This is a method of direct communication between the parties in a dispute marked at resolving it through discussion. Negotiation however requires the parties or any appointed negotiators to possess the requisite skills and competences to search and create opportunities capable of resolving the dispute. In the Law Society Short Glossary of Dispute Resolution Terms, Negotiation has been defined as any form of direct or indirect communication through which parties with opposing interests discuss the form of any joint action which they might take to manage and ultimately resolve the dispute between them. Negotiations may be used to resolve an already-existing problem or to lay the foundation for a relationship between two or more parties in the future. Goldberg, Frank & Rogers (1992) characterizes Negotiation as the "preeminent mode of dispute resolution", which is hardly surprising given its presence in virtually all aspects of everyday life, whether at the individual, institutional, national or global levels. Each negotiation is unique, differing from one another in terms of subject matter, the number of participants and the process used.

Mediation

This is a structured, interactive method where an impartial third party known as a mediator assists disputing parties in resolving conflict through the use of specialized communication and negotiation techniques. The mediator is invited to intervene and facilitate the settlement of the dispute, with the consent of the parties involved. Mediation becomes of vital importance when the parties are emotionally involved to their perceived rights and benefits to a point where the objective and joint search for settlement/solution is hindered. A mediator mainly facilitates open communication, promoting understanding, and creates an enabling environment dialogue between parties. All the relevant parties in mediation are encouraged to actively take part in the process This process is very effective in settling disputes when the mediator is able to

resist pressures and influence from interested parties (Mejida,2007). One feature of this method is that the disputing parties are able to keep a control of both the mediation process and the outcome of the settlement. Since it is a "party-centered" process, it focuses primarily on the needs, rights, and interests of the parties. The mediator may use a variety of techniques to guide the process in a productive direction and to support the parties find the best possible solution (MacDuff 2016).

Conciliation

This is a dispute resolution model where a third party intervenes to assist the parties in dispute to resolve their issues. Conciliation can be distinguished from mediation in that a conciliator may be government personnel, who may preside with reference to government policy, working in compliance to regulating obligations or laws. When a dispute/conflict involves a larger segment of the society carrying a sociopolitical perception, an alternative form of conciliation known as Reconciliation is adopted. Conciliation is defined in the Halsbury's Laws of England as a process of persuading the parties to reach an agreement. Conciliation is also defined as a non-adjudicatory or non-adversarial as there is neither a claimant/plaintiff nor a respondent/defendant in this method and as a result the proceedings are non-adversarial in nature (Bakshi 1990). International Labour Organization (ILO) Labour Legislation Guidelines describe Conciliation as an ADR mechanism involving a settlement procedure where the parties to the dispute, through neutral third-party intervention, to reach a mutually agreed and acceptable settlement of a dispute. This is considered as an effective and evocative alternative to litigation for resolution of disputes through the guidance and assistance of a neutral and impartial third party.

Arbitration

This is an ADR model where the parties in dispute, appoint an expert in dispute settlement referred to as an Arbitrator. The Arbitrator hears the relevant parties and based on the evidence and discounts of the parties decide the dispute for them. Although the parties retain control over the arbitration process, the Arbitrator retains the power to give binding decision on the parties. Arbitration is based on the private agreement of the parties, who are able to appoint or remove arbitrator(s), and choose the arbitration

venue (Nwakoby, 2007). At its core, arbitration the private, adjudicative determination of a dispute, by an independent third party. An arbitration may include the intervention of an individual arbitrator or a tribunal. A tribunal may contain of any number of arbitrators although some systems maintain an odd number for obvious reasons to avoid a tie. The disputing parties collectively agree to hand over the power to make a decide on the dispute to the arbitrator(s) and is an alternative to litigation. However, the decision is generally just as binding and enforceable, unlike mediation, negotiation and conciliation.

Hybrid Processes

These are other alternative (appropriate) dispute resolution (ADR) models/techniques that require unique expertise cum skills to enhance their efficiency in the settlement of such disputes. These models can be engaged exclusively or combined. In these processes various characteristics of a combination of models are adapted intermittently as the situations require. Some hybrid processes around the world are Fast-Track Arbitration, Mediated Arbitration, Expert Appraisal, Mini Trial and Settlement Conference etc. Consequently, hybrid processes are like "an open-system technique of competing values that are characterized by flexibility, innovation, and creativity" (Amaeshi,2008). The principle of the hybrid processes is to be practical in defining solutions to settle the dispute successfully. Centre for Dispute Resolution (CEDIRES) in Begium describes the Hybrid processes as ADR processes, in which specific elements of the basic processes have been combined to create a wide variety of ADR methods (e.g., mediation is combined with arbitration in med-arb). Hybrid ADR processes may also incorporate features found in court-based adjudication; for example, the mini-trial mixes an adjudication-like presentation of arguments and proofs with negotiation.

2.4.1 Alternative Dispute Resolution in Environmental Disputes – Global Perspective

On the whole, all forms of dispute resolution which are separate from a full-scale court procedure, are considered as Alternative Dispute Resolution (ADR) Methods (Bingham 1986; the World Bank Group 2011). One of the reasons that ADR systems have gained

much popularity can be attributed to their flexibility, informal setting, ease of access and, the amicable manner in which cases are handled. The World Bank Group (2011) observed that ADR allows access to justice for people by reducing time and cost, and also increases disputant satisfaction with outcomes. The method is also ideal for disadvantaged communities to go up against overriding influences of multinational companies (Oguntoke and Annegarn, 2014). Although the Courts have been the last choice in resolving environmental disputes in most civil societies, the use of alternative dispute resolution methods is developing rapidly (Lee 2008). For example, public complaints are well established as an authentic means of redress for perceived adverse impacts of environmental pollution in Portugal and Brazil (Dong et al 2011; Carvalho and Fidélis 2011). Similarly, in China, Liang (2012) observed that informal channels play an active role in dispute resolution even though formal channels are quite dominant. Globally this emerging relevance of alternative dispute resolution channels can be linked to major setbacks encountered by public interest litigation against environmental degradation.

Mediation being used as a means of resolving environmental disputes is not extraordinary with one of the earliest environmental mediations recorded took place in the United States in 1973. Since then the practice of environmental dispute resolution (EDR) for settling disputes is widely used in the US and Canada for several decades.

USA

Environmental dispute resolution in the US can be traced to C.H.W. Foster (Foster, 1969) who suggested the use of conciliation to resolve environmental disputes in 1969. Environmental dispute resolution, or EDR, has been used in the United States since the early 1970s. Since that time, hundreds of land use, pollution, water resource, air quality, and other environmental conflicts have been resolved through the use of facilitation, mediation, arbitration, and associated community-involvement techniques. Environmental issues gained widespread public and political attention in the 1970s in the United States. This was endorsed by Ford and Rockefeller Foundations which supported trial cases in the early 1970s. Constructing on the idea perceived by Foster, Cormick and McCarthy began to use mediation to resolve a dam dispute in the state of

Washington. This became the first documented case of environmental mediation in 1973 (For a description of this case see Cormick G, ‘Mediating environmental controversies: perspectives and first experiences’ (1976) 2 Earth Law Journal. 215-224). This is known as the Snoqualimie river mediation where a dispute arose with the decision to dam a flood-prone river which would have impacted the pristine wilderness of the area. The mediation was a success in that a consensus was reached by the parties where decision was made to dam a smaller portion of the land for the protection of the farmers while preventing the degradation of the environment. Later, the Storm King Mountain dispute provided more evidence that potentially expensive, lengthy environmental disputes might be better solved through mediation, rather than litigation (Bingham & Haygood 1986). Bingham defines environmental dispute resolution as "a variety of approaches that allow the parties to meet face to face to reach a mutually acceptable resolution of the issues in a dispute or a potentially controversial situation." At the same time, alternative dispute resolution (ADR) was emerging as an alternative to handling disputes. Almost immediately, these trends became merged in the new field of environmental dispute resolution (EDR), which grew to help avoid protracted environmental court battles. According to Peterson (1992) in 1987, the EPA made ADR an "agency-wide priority." Further to this Harter (1997) states that by 1997, the EPA had finalized 12 negotiated rulemakings. EPA regional offices have created mediation programs to resolve such environmental disputes as allocation of responsibility in Superfund cases. According to Melling (1995) after Exxon Valdez tanker ran aground in Prince William Sound, causing the largest oil spill in the history of the United States, Secretary of Interior raised the profile of government mediators by mediating the Alaska fishermen's battle with oil and gas companies. Since that time, the Secretary has continued to mediate various environmental disputes around the country.

Hupp & Tatum (2018) while contributing to Michigan Environmental Law Deskbook states that the Michigan Court Rules define ADR broadly as "any process designed to resolve a legal dispute in the place of court adjudication" including process defined by the court rules or any other procedures "ordered on stipulation of the parties." They also state that the federal Alternative Dispute Resolution Act of 1998 defines alternative dispute resolution processes as those in which "a neutral third party participates to assist

in the resolutions of the issues in controversy," including early neutral evaluation, mediation, mini-trial and arbitration. This trend of environmental mediation in the US was in concurrence with the growth of some significant federal environmental protection legislation including the National Environmental Policy Act, the Clean Air Act, the Clean Water Act and the Resource Conservation and Recovery Act etc. Consequently, the history of EDR in the US spans about 30 years. In the following years since this first environmental mediation recorded, countries such as Canada, India and New Zealand have also incorporated environmental mediation as an alternative dispute resolution method for environment related disputes. In addition to this environmental mediation has gained recognition from a number of treaties and international charters such as the United Nation Convention on Laws of the Sea (UNCLOS), Vienna Convention for Protection of the Ozone Layer and the WTO dispute Settlement Regime amongst others.

Canada

In Canada, the use of ADR has not expanded as quickly or as broadly as in the United States. Not only is ADR a relative newcomer in Canada, but so is EDR and the environmental conflicts that call for its use. While there were, several environmental mediations in Eastern Canada in the 70s and 80s which the Vol. 4 of Canadian Environmental Law Association's (CELA) *Environmental Mediation - Theory to Practice,* lists and describes, environmental issues in Canada did not gain widespread attention until the 1990s. For federal environmental law, the first federal case of great environmental prominence in Canada was *the Friends of Oldman River Society v. Canada (Minister of Transport)* in 1990. The techniques used range from consensual processes like mediation to quasi-adjudicative techniques such as arbitration. Mediation is the technique most commonly used to resolve environmental conflicts in Canada.

Mathers (1995) records that an early, prominent, regulatory "negotiating" process did take place in Western Canada during the 1980s regarding the Alberta Swan Hills hazardous waste disposal facility. Nevertheless, the first official mediation, under the Canadian Environmental Assessment and Review Process, was initiated in April 1992. He goes on the state that federal, provincial, and local officials convened to mediate

disputes over risks to Brant geese, impacts on fish habitat, and socio-economic impacts of the proposed construction of a small harbor in the Haida Gwaii/Queen Charlotte Islands and that in 1993, after the successful culmination of 15 major meetings, numerous work groups, and public consultation, a final consensus report was submitted to the Minister of the Environment. Six administrative tribunals in Canada, specifically the Alberta Environmental Appeal Board (the "Alberta EAB"), the Manitoba Clean Environment Commission, the Ontario Environmental Assessment and Appeal Board, the Ontario Energy Board, the *Qu6bec Bureau d' audiences publiques sur Penvironnement* ("BAPE"), and the Nova Scotia Environmental Assessment Board, employ some form of EDR. For example, the Alberta EAB mediated 45 appeals from 1993 to mid-1998.

Considering that globally there is a trend to promote mediation as an effective tool for the resolution of environmental disputes, countries have made legislative efforts to establish environmental mediation as a method of dispute resolution. In 1998, United States enacted the Environmental Policy and Conflict Resolution Act of 1998 and created the United States Institute for Environmental Conflict Resolution. In 2002, the EU advocated for the 6th Environment Action Programme of the European Community (2002-2012) for active use of mediation in environmental disputes within the EU countries. Israel recognized and established a Joint Environmental Mediator training program which employed both Israeli and Palestinian mediators. Even though there is no guarantee that mediation would instantly resolve all environmental disputes, considering the method already used and the advantages of mediation as opposed to the traditional forms of dispute resolution, it is a viable method to resolve environmental disputes that arise from development.

2.5 Environmental Dispute Resolution in Sri Lanka

Due to the vast number of environmental issues which can be identified, and the limitations on time and cost, this research focuses on specific environmental issues that have culminated to disputes relating to development processes. This varies from specific issues such as relating to energy generation, infrastructure and natural resource management. Also, this research explores the applicability of Alternative Dispute

Resolution as a non-adversarial or non-judicial method for the settlement of environmental disputes and is concerned largely with the wider environmental issues of economic impact in general, development in particular, and its consequences on the sustainability of exhaustible and renewable natural resources.

During the Third South Asia Judicial Roundtable on Environmental Justice for Sustainable Green Development in Sri Lanka (proceedings published by Asia Development Bank in 2015), it was presented that the traditional adversarial system used for environmental dispute resolution in Sri Lanka is Litigation, with limitations on the rules of evidence. While Alternative Dispute Resolution methods have been more effective in resolving commercial and private disputes, adversarial method of litigation is resorted to as the only means of resolving environmental disputes in Sri Lanka. In the Sri Lankan context, the view was that, in environmental disputes resolution, parties should try to resolve disputes at the earliest possible opportunity and where private decision-making through informal discussions and problem solving, negotiations, and mediation can help end a conflict. A dispute resolution method which is accessible, affordable, effective and adaptable is an ideal method as environmental disputes vary according to a given situation. While formal litigation is expensive and long drawn, there are undoubtedly dispute resolution methods which as less costly and more expeditious than a court proceeding. Therefore, in this research we explore the questions of whether alternative dispute resolution methods are suitable for resolving environmental disputes relating to development in Sri Lanka? If not so, what improvements should be made to the existing dispute resolution methods? The study also considers the environmental safeguards in Sri Lanka particularly for development and the consequences of its violations on the natural environment.

Although resolution of disputes of any nature, whether related to the environment or otherwise, are through court processes, due to laws delays, high costs and technicalities associated, the Alternative Dispute Resolution (ADR) methods have evolved since the seventies. (Horowitz, 1977). In developing countries like Sri Lanka, the nature of environmental disputes relating to development is mainly because the economic, social and political structures are yet to be affected significantly by environmental changes

brought about by development. Consequently, in developing countries not only the use of environmental resources is at stake, but also the process of development. If the state, civil society and the market can act together to ensure development happens while safeguarding the environment. Several authors (Castro and Nielson 2003; Yasmi et al. 2006) debate that disputes arise when stakeholders have differences that cannot be reconciled or interests, values, perceptions and goals that are not compatible. Moreover, if left unresolved or unmanaged, disputes of this nature are likely to escalate and intensify. White et al. (2009) articulates that what differentiates dispute from just disagreements is consequently a behavioral expression of previously underlying attitudes where one party takes action at the expense of another party's interests' (Bob, Bronkhorst, 2010).

A substantial raise in public interest litigation, relating to environmental matters, has also been evident in the recent past (Goonetilleke 2014). Litigation as a dispute resolution method has been invoked because of the role that the courts have had to play in the resolution of Public Nuisance cases which were filed in court under the provision of Section 98 the Code of Criminal Procedure (Act No. 15 of 1979 as amended).

The law of nuisance and the environment is closely linked and nuisance is concerned with the maintenance of the health and safety of the general public. Since public nuisance is a criminal offense under criminal law, the Code of Criminal Procedure empowers the Magistrates to make conditional orders with regard to environmental matters that are capable of causing an obstruction or a nuisance in order to prevent any further harm or injury being caused to the environment. Because of this provision, it has been one of the most commonly used methods of resolving disputes arising from development activities which cause obstruction or nuisance to the public. These provisions are subject to the provisions of the Penal Code (No.2 of 1883 as amended) which provides that "*a person who does any act, or is guilty of an illegal omission, which causes any common injury, danger or annoyance to the public or to the people in general who dwell or occupy property in the vicinity, or which must necessarily cause injury, obstruction, danger, or annoyance to persons who may have occasion to use any public right",* is guilty of a 'public nuisance' (Sec 261). Therefore, the provisions

of the Code of Criminal Procedure Act have been used by the courts together with Section 261 of the Penal Code to deal with disputes arising from environmental pollution and damage.

Environmentalists in the recent past have invoked the jurisdiction of the courts in resolving environmental disputes and has resulted in a number of important judicial decisions in favour of the protection of the environmental rights of the people. In the recent years there has been a sharp increase in the number of environmental disputes being litigated before courts of Sri Lanka. Without a separate system of resolving environmental disputes, Judges of the Courts in Sri Lanka, particularly in Magistrate's Court, Court of Appeal and Supreme Court, have had to interpret the constitution and relevant legislation and have consequently innovative and significant body of jurisprudence on this subject. Some cases that have come before the courts have resulted in the recognition of international environmental concepts on sustainable development, inter-generational equity and the doctrine of public trust. Considering the large number of environmental related litigation, it is important to note that the judiciary has begun to play a vital role with regard to environmental protection in Sri Lanka.

The international principle of sustainable development was recognized by the judiciary for the first time in *Bulankulama v The secretary of the Ministry of Industrial Development* (mining case Eppawela Phosphate). This is the first judgment to refer exclusively to international environmental instruments, such as the Stockholm Declaration on the Human Environment in 1972 and the Rio Declaration on the Environment and Development of 1992. In its rejection of the development proposal, the Court finally has the idea of sustainable development checked while acknowledging the right of the state to carry out economic development activities for the benefit of the people (EFL 2009).

In the *Galle Face Green Case*, the Urban Development Authority (UDA) tried to lease the Galle Face Green into a commercial entertainment company. The Petitioner, who was a registered environmental NGO, asked for further information and was rejected by the UDA. Moreover, in this case, one of the questions raised by the court was

whether UDA had the power to lease the Galle Face Green. It was assumed that Galle Face Green was accessible to the public, established and continued as a public service for 150 years. The Court noted that

> *"... Galle Face Green should be maintained as a public service under Sir Henry Ward's commitment and the essential resources for such use should be obtained from the Government of Sri Lanka, successor to the colony governor, who has made the dedication ...* ".

Accordingly, the Court has ruled that the agreement was ultra vires and without force or right. In addition, it was found that Galle Face Green should be cultivated for public service. This judgment also establishes the Doctrine of Public Trust. When the commercial entertainment company has been built, the general public must pay money to face Green Galle's face and the environment of the area is also polluted for commercial activities. Therefore, the Court of First Instance, by inviting the Public Trust Doctrine, has prevented such a violation of natural remedies by private institutions.

The case law in Sri Lanka relating to sustainable development increased in numbers with some significant cases such as *Bulankulama vs. Secretary, Ministry of Industrial Development (SCFR Application No.884/99) (Eppawela Phosphate Mining Case), Sugathapala Mendis and other vs. C B Kumaratunga and others (SCFR No 352/2007) (Water's Edge Case), Environment Foundation Limited vs. Urban Development Authority (SCFR Application No 47/2004) (Galle Face Green Case)*, and *Environmental Foundation Limited vs. The Land Commissioner (CA Application No 573/1992) (Kandalama Construction Case)* being some of the significant cases where court intervention prevented adverse impacts of development projects which potentially could have violated the environmental rights of people. The collective legal regime provides that environmental protection must to be considered as a fundamental part of the development procedures to achieve sustainable development. Some of the major development project which have resulted in significant environmental issues are the *Oma Oya Irrigation Project, Colombo Port City,* and *Norochcholai Coal Power Plant*. All of these projects have significance in terms of the development requirements of the

country. Yet these are also great examples of situations where the existing legal regimes have failed to prevent devastating impacts on the environment. Where litigation has been the mode of dispute resolution to seek redress for environmental disputes, lack of sufficient evidence can impede those efforts. The route of alternative dispute resolution has been resorted to in achieving effective solutions where unlike the formal processes of litigation which employs the concept of adjudication, assessment of evidence and then a final judgment on the matter, alternative consensual processes provides the parties with a greater degree of control on the procedure employed in the resolution of the matter. Alternative Dispute Resolution (ADR) facilitates the confidentiality and voluntary nature of the processes give it a unique overlook as an alternative dispute resolution method for environmental disputes (Illankoon et al., 2019). Further to this the lengthy nature of environmental disputes which come before courts in Sri Lanka is a factor to be considered. An example is the previously observed Norochcholai Coal Power Plant case which has been an ongoing matter for the past 3 years where the adverse effects of the NCPP on the people living there has not been curtailed nor remedied, demonstrates the importance of resolving environmental disputes as early as possible for the benefit of the public. Add to this the costs of proceedings, the laws delays which makes it a time-consuming effort and the unpredictability of the outcomes in court along with the lack of a mutually beneficial grounds on which these decisions are being made, makes litigation impractical in balancing the need to successfully implement a development projects while ensuring the environmental rights of the people are protected. As opposed to this ADR offers an excess of advantages. Considering that this method relies on the direct communication between parties, it reduced the breakdown in the relation of the parties in the manner in which litigation does. In contrast to litigation, ADR allows the partied to view a dispute from a number of vantage points and examine the causes of the disputes from the point of view of both parties. Also, ADR allows for individuals who are both skilled and competent in specific subjects dealt with in the resolution of this issue, which helps the parties to find solutions which are mutually beneficial ably guided by subject experts (Illankoon et al., 2019).

2.6 Chapter Summary

In conclusion this literature review is also linked to the first form of research methodology defined in Chapter 3 as scrutinizing of secondary sources and has explored the topics of Environmental disputes, environmental dispute resolution method in Sri Lanka, effectiveness of judicial intervention in resolving environmental disputes and alternative dispute resolution methods as possible alternative methods for environmental dispute resolution in Sri Lanka. Therefore, the researcher follows these findings with secondary and primary data collected as well as further elaborated in the succeeding Chapter.

CHAPTER 03

RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this chapter is to describe in part the research methods and the methodology applied for this research. The chapter describes first, the choice of research approach (with reference to the research philosophy), after that, the research design, including the limitation of the research tools chosen. Subsequently, there is a discussion on their ability to derive useable results, to meet the aims and objectives set by this dissertation. The chapter also explains the sample size and the strategy applied, the data analysis methods used, and concludes with a brief discussion on the limitations faced and problems encountered during the research.

3.2 Research Approach

This dissertation makes use of qualitative research strategy, where the research approach implemented is of interpretivism and phenomological approaches.

Interpretivism is one of the commonly known philosophical paradigms in research, which values subjectivity. Interpretivism argues that truth and knowledge is subjective, based on lived experiences and understanding of them. Bryman (2008) presents four main approaches to interpretivist research: (a) hermeneutics, (b) verstehen, (c) symbolic interactionism and (d) phenomenology. Of these Phenomonology focuses on interpretation and description of people's lived experiences (Wilson, 2015).

Willis (2007) describes interpretivism as "an approach which is implemented by the researcher in order to synthesize facts which are derived mainly from archival and secondary sources, and which are qualitative in nature". He also distinguishes one characteristic of interpretivism is that these facts are "abstract in nature, and governed by a variety of factors which are non-tangible and difficult to measure". As this research is to study the application of a particular method to resolve an environmental dispute, the researcher chose the interpretivist approach, rather than the positivist and the

pragmatist approaches, because abstract, non-quantifiable variables such as “finding the underlying causes of environmental disputes”, comparing “traditional adversarial dispute resolution methods” with “non-adversarial alternative dispute resolution methods” and analyzing whether the alternative dispute resolution methods and their application in resolving environmental disputes amicably, were part of the objectives of this dissertation. These components are not easily measurable and have complex and differing connection between them. Therefore, interpretivism was considered to be the suitable approach. Within this broader approach, phenomenology approach was considered because, in addition to the archival and secondary sourced relied upon for facts, the researcher also set out to learn from the experience of a group of individuals who have extensive lived experience in the areas of environmental dispute resolution in Sri Lanka.

The discipline of phenomenology is defined as the study of structures of experience, or consciousness as experienced from the first-person point of view. Smith (2018) states that “the central structure of an experience is its intentionality, its being directed toward something, as it is an experience of or about some object. An experience is directed toward an object by virtue of its content or meaning (which represents the object) together with appropriate enabling conditions”. Also, the researcher explores the application of legal norms in this research and therefore this was another reason that the phenomenological philosophy was considered. Yeke (2015) states that according to this approach, legal norms allow us to explore what the facts related to the actions of humans in social life are in the flow of concrete situations and events. In addition to this, the evolving potential of law elaborates on the important elements of history, sociology, politics and economics that depict law as a subsisting manifestation, endeavoring to justify the history of law through the precepts of ‘sociological jurisprudence and the sociology of law’. Undertaking research that involves this whole perspective, needs to be evaluated in a far more liberal manner than could be obtained through quantitative methodology.

3.3 Research Design

This research uses a qualitative research strategy and, in this sense, there will be no numeric data nor were quantitative data produced (Bell, 2005; Sarantakos, 2013; Silverman, 2004). A qualitative research strategy was considered applicable for the purposes of this research, because the connection between several different variables had to be established through interpretation.

Also, the research makes use of triangulation, which is the use of multiple methods or data sources in qualitative research (Patton, 1999) to develop a comprehensive understanding of phenomena (Cohen and Manion, 2002; Altrichter et. al, 2008). For this research, triangulation was very useful because the researcher aimed to find the connection between different variables such as the causes of environmental disputes and (relating to development in particular) and the effectiveness of the dispute resolution methods engaged. This necessitated (in addition to the secondary sources relied upon), interviews and questionnaire with individuals who play a key role in the resolution of environmental disputes in Sri Lanka as well as engaging in managing such disputes within the legal norms. In order to study in depth, the lived experiences of individuals involved in environmental dispute resolution, interpretative phenomenological analysis (IPA) was chosen. IPA is a major distinctive approach to phenomenological research in psychology (Smith 2011). The validity and the limitations of the tools used to implement the research strategy will be discussed next.

3.4 Research Methods

For the purposes of this research, the researcher used a combination of primary and secondary data sources as research method. Since this research requires an analysis of case law and juristic writings, the researcher used archival and secondary data sources along with primary data sources of interviews and questionnaires. The interviews were conducted with a number of individuals with extensive lived in experience with environmental dispute resolution. The limitations of each method are discussed below. As a complementary method, questionnaire was distributed among a composition of

environmental law practitioners, legal experts, international conservation experts, environmental activists, experts from development sector and regulatory authorities.

Archival and Secondary Data Sources

In this research the author relied upon published information available from other sources that was already gathered for the literature review. As this research looked at environmental disputes and dispute resolution in Sri Lanka, time constraints did not permit primary investigation and data collection from all possible sources. However, archival and secondary data was readily available and was easily accessible for this research. As pointed out by Argyrous (2009), "secondary data are an abundant resource for researchers" as the Internet has made vast amount of data available. He also lists the advantages of savings on cost and time, access to quality data that has been tested, access to difficult populations and availability of longitudinal data. One of the main reasons that this research was carried out using qualitative research methodology is because of the abundance of secondary data that was available and accessible.

Interviews

In this research the author chose semi-structured interviews consisting of several questions conducted with a number of individuals (who had extensive lived in experience with environmental dispute resolution), in order to cover more abstract aspects of the research. Interviews are often used in the social sciences, because they give the opportunity for a more in-depth, open discussion, and more informal, free interaction between the interviewer and the interviewee (Potter, 2002; Winchester, 1999; Sarantakos, 2013). Although this method produced subjective results, the flexible format of the interviews was an advantage for this study, as some nuances of the research such as exploring "emotions", and "creating memorable experience" could not be properly captured with the questionnaire design and contributed to gaining a deeper understanding of the connection between different variables such as the causes of environmental disputes and (relating to development in particular) and the effectiveness of the dispute resolution methods engaged. And if this research could be done again, this could probably be chosen as the primary, not the secondary research method.

Questionnaire

Questionnaires were chosen as a complementary data collection method for this research because this allowed the researcher an efficient and timely method to collect information from multiple respondents in a short period. A common disadvantage of the questionnaires however was the fixed and strict format, which removes the possibility for more in-depth or abstract observation (Bell, 2005; Sarantakos, 2013). Even though the questionnaires provided linear and clear results, many elements from the research were left uncovered.

3.5 Sampling Strategy

For the purposes of collecting primary data for this study, the researcher chose to examine individuals who were specifically involved in the resolution of environmental dispute in Sri Lanka as well as engaging in managing such disputes within the legal norms. In order to collect data from interviews, the researcher selected a small sample of 6 individuals with extensive experience in engaging environmental dispute resolution in Sri Lanka for over 15 years. As interpretative phenomenological analysis (IPA) was chosen in order to study in-depth the lived experiences of these individuals, this was expected to capture as closely as possible the way the phenomenon is experienced by the individual (Willig 2008). IPA is concerned with the detailed exploration of personal lived experience and the participant's perceptions of the experience and sense-making activities (Smith and Osborn 2008) and requires the intensive and rigorous analysis of each individual's account with the possibility to move the analysis to a more theoretical level, looking for generic overarching patterns across cases (Smith and Eatough 2006). Because of the idiographic nature of the study, IPA uses small samples and focuses on the individual voice (Smith, Flowers and Larkin 2009). Howitt (2010) shows that there are numerous studies are based on interviews with three to six participants. There is also evidence that the detailed exploration of a major theme in a wider study (e.g. McIntyre and Reynolds 2011), or studies of a single case (e.g. Rhodes and Smith 2010), are published. The interviews took place as face to face exercises and was recorded and transcribed by the researcher. The interviews took place over a period of one month.

The group chosen for the questionnaire survey consisted of 30 individuals who were a composition of environmental law practitioners, legal experts, international conservation experts, environmental activists, experts from development sector and regulatory authorities. All of the participants were approached and questionnaires were distributed through email, which were completed by the participant and was returned through email as well. This was carried out over a period of four weeks.

3.6 Instrument Design

For the purposes of collecting primary data for this study, the researcher designed separate interview script and questionnaire script.

Interviews

The interview scripts consist of six short but open questions. The questions for the participants were designed to reflect their experience as environmental dispute resolution experts and managing such disputes in Sri Lanka, addressing specific components such as what dispute resolution methods are used for environmental disputes and the effectiveness of adversarial and non-adversarial dispute resolution methods in Sri Lanka.

Questionnaire

The questionnaire consisted of ten statements, related to environmental disputes and the resolution of the same. The first part of the questionnaire consisted of demographic questions, related to the professional role of the participants, such as field of expertise, length of their experience in the area of study, designations and types of organizations/institutions they engage in. The core questions were divided into groups for clarity, addressing the main objectives of the research, through the perspective of the practitioners, to address the primary experiences, established in the previous chapter to assess the applicability of ADR for environmental dispute resolution in Sri Lanka.

The full scripts of the questionnaires and the interviews are available in the Appendices.

3.7 Data Analysis

Data from archival and secondary sources were analyzed as skimming (superficial examination), reading (thorough examination), and interpretation. This process which is content analysis is the process of organising information into categories related to the central questions of the research. It is widely accepted that this entails a first-pass document review, in which meaningful and relevant passages of text or other data are identified. The researcher should demonstrate the capacity to identify pertinent information and to separate it from that which is not pertinent (Corbin & Strauss, 2008; Strauss & Corbin, 1998).

The results of the interviews and the questionnaire were analyzed manually, where the researcher aimed to distinguish common words, phrases, and group them together, in order to be able to determine tendencies and predispositions in the answers of the respondents. Because of the small number of respondents and the qualitative research approach of the study, the author chose not use any of the statistical software available such as SPSS or STRATA. The major findings of this dissertation will be discussed in details in the next chapter.

3.8 Limitations

There were a number of challenges and limitations which the researcher encountered while conducting the research for this dissertation.

The first challenge was obtaining interviews from a sufficient number of participants. Identifying a specialized group of participants for the interviews was challenging. Although the primary target group was those who exclusively engaged in dispute ‘resolution’ and legal measures, the researcher’s attempts to gain insight from related development companies was turned down due to on-going environmental disputes and/or litigation and the reluctance to allow opportunities for external research. While this did not affect the conclusions, such additional insight would have added more value to the recommendations.

The second challenge was that the researcher was restricted by time and cost, which was the reason the researcher resorted to the choice of more efficient method, such as the questionnaire, instead of the more time-consuming focus groups or participant observation.

In relation to the methodology chosen, there are some limitations which need to be declared. One of the challenges is the fact that because of the small sample, the data collected and the findings made cannot be inferred on a broader scale. Therefore, the generalizability of the results is uncertain.

Another limitation of the methodology was the fact that the researcher used interpetivist and phenomenology approach, which was determined by the nature and the objectives of the research. In this sense the results and the achievements of this project can be deemed as partial, because the connections between the different variables have been determined not on the basis of experimental evidence, but on the basis of the analytical and judgmental skills of the researcher, in the context of a particular academic field.

3.9 Chapter Summary

This chapter outlines and justifies the research methodology applied in this study and attempts to explain its validity. Because of the nature of the research, the researcher selected for the qualitative approach, bound by interpretivist and phenomological approaches. The key research tools were secondary sources, supplemented by interviews and questionnaire with two groups of participants – specific group engaging in environmental dispute resolution in Sri Lanka and a wider group of regulatory authorities, practitioners of environmental conservation and international development sector etc. The participants were cautiously targeted and engaged through a sampling technique. The results were analyzed manually, due to the small sample of participants. The key findings of this dissertation are discussed in the succeeding chapter.

CHAPTER 04

DATA FINDINGS & ANALYSIS

4.1 Introduction

This chapter discusses the research findings of the data collected from primary and secondary data sources. This research is based on secondary data collected from library research (presented in the literature review and will be referred with interviews as the main sources and supplemented by questionnaire. The findings are presented in relation to the research objectives states in this study. The method used to analyze this data has already been discussed in the methodology chapter.

4.2 Demographics of the Participants

4.2.1 Categories of Interviewees

Since this research makes use of qualitative research strategy, where the research approach implemented is of interpretivism and phenomological approaches and focuses on interpretation and description of people's lived experiences (Wilson, 2015), the researcher chose to examine individuals who were specifically involved in the resolution of environmental dispute in Sri Lanka as well as engaging in managing such disputes within the legal norms. In order to collect data from interviews, the researcher selected a small sample of 6 individuals with extensive experience in engaging environmental dispute resolution in Sri Lanka for over 15 years. Because of the idiographic nature of the study, IPA uses small samples and focuses on the individual voice (Smith, Flowers and Larkin 2009). The justification of this is further elaborated in the methodology chapter.

The interviewees are individuals who specialize in environmental dispute resolution in Sri Lanka and did not include respondents who are usually parties to such disputes as they have limited knowledge of the processes and the technicalities involved in the regulation, management and resolution of environmental issues as opposed to from the point of view of those who specialize in and are intricately involved in these processes.

Table 4.1 Description of Interviewees

No	Designation	Experience (Yrs)
01	National Coordinator of an Inter-Governmental International Environmental Conservation Organization / Senior Lecturer	Over 25 yrs
02	Director EIA Unit of a Regulatory Authority	Over 25 yrs
03	Attorney at Law / Senior Partner of Non-profit Organization engaging in environmental related Public Interest Litigation / Senior Counsel for environmental PIL cases	Over 25 yrs
04	Head of Environment and Forestry Unit of a Regulatory Authority	Over 25 yrs
05	Attorney at Law / Chair Person of NGO engaging in environment related activism and public interest litigation	15 yrs
06	Attorney at Law / Former Chairperson of Non-profit Organization engaging in environmental related Public Interest Litigation / Senior Counsel for environmental PIL cases and Arbitration Specialist	Over 25 yrs

The interview questions were designed with the aim of invoking responses from the interviewees in relation to the research objectives of this study. These are;

- To identify the underlying causes of environmental disputes in Sri Lanka,
- To assess the effectiveness of dispute resolutions methods used to settle such environmental disputes in Sri Lanka,
- To confirm the applicability of alternative dispute resolution methods for environmental disputes in Sri Lanka,
- To propose recommendations to improve dispute resolution mechanism for settlement of environmental disputes in Sri Lanka.

The interviewees were approached by the researcher and had face to face interviews where the researchers provided five open ended questions in a semi structured form and the respondents shared their knowledge and lived in experiences in an informal manner. Their opinions and views are extracted and explained accordingly.

4.2.2 Categories of Questionnaire Respondents

In addition to the interviews, the researcher also attempted to gather responses from a number of individuals for a questionnaire using confirmatory statements. These statements were designed to reflect the research objectives and based on the findings of the secondary sources and interviews. The respondents were a composition of environmental law practitioners, legal experts, international conservation experts, environmental activists, experts from development sector and regulatory authorities and data collection table is attached as Annex II hereto.

This questionnaire of statements received a sample size of twenty-four respondents and the responses were analyzed using interpretative approach and briefly discussed in the following sections. The justification of this was further elaborated in the methodology chapter.

4.3 Research Findings

4.3.1 Introduction

This part of the chapter presents the findings and analysis of the data obtained from the individual interviewees and the questionnaire, on the applicability of ADR methods in environmental dispute resolution in Sri Lanka.

4.3.2 Interviews

4.3.2.1 Identifying Environmental Disputes

Environmental disputes in Sri Lanka can be categorized into the major areas of pollution and degradation. These issues varying from air, water, soil and noise pollution, natural resource management issues relating to extraction and exploitation, energy generation, waste management, natural disasters and biodiversity loss, all of which contribute to the degradation of the environment. In the interview with one of the respondents who had been working in an international civil service, in a quasi-government organization for over 18 years, it was emphasized that environmental degradation through human induced activities on development is a culminated environmental issue in Sri Lanka.

The respondent, who has an environmental economics background, further elaborated that in the span of his experience that, while development is a necessity for the country, unregulated development has caused pollution and over exploitation of resources. The interviewees who were individuals engaging in regulation and management of environmental issues emphasized the destruction of forest and wildlife reserves as a result of development is an inevitable environmental issue which they have encountered in their collective years of experience. The three interviewees who are individuals who engage in resolution of disputes relating to environmental issues, stated a combination of land and forest degradation, pollution of air, water, soil and noise as well as habitat loss caused by development are significant environmental issues.

Moreover, the respondents with dispute resolution experience stated that most of the environmental issues they have encountered which have culminated to disputes are caused by the lack of adherence to existing environmental safeguards as well as failure on the part of the relevant authorities in managing and regulating projects at the inception. This fact was revealed in the statements of the respondents engaging in regulation and management of environmental safeguards, where the non-compliance of these safeguards is a common cause for the environmental disputes that are related to development activities. Some of the respondents were of the view that the apparent non-compliance was not always due to the lack of awareness of such safeguards but there have been situations where adequate guidance has not been given by the regulatory authorities. Also, some of the respondents inserted that there was also the lack of monitoring by the regulatory authorities which gives leeway for non-adherence to the laws and regulations. The respondents who engage in dispute resolution had a combination of opinions which can be summaries as one of the major reasons for the lack of compliance is the time constraints of obtaining the relevant environmental clearances is rarely considered in the initial planning and designing in development projects. Therefore, the reluctance to bear additional time and cost in relation to following all the procedures results in the rising of environmental disputes which hinder the development process.

The two respondents who are individuals who are in regulatory authorities, while endorsing this as a common cause, also emphasized that though the regulatory authorities have a fundamental duty towards the imposing environmental safeguards in development, there is also a level of due diligence expected from the developers to make relevant considerations in the project designs. While they do not endorse that lack of awareness of environmental protection laws as the cause for non-compliance, they stated that lack of resources to maintain diligent monitoring and political and other influences plays a role in the failure of regulatory authorities to impose environmental safeguards more emphatically in development. Such imposition would have been a catalyst in preventing the escalation of environmental issues that lead to disputes. However, as the focus of this research is limited to the resolution of disputes and not the prevention of such disputes, the researcher did not explore this aspect further.

4.3.2.2 Environmental Dispute Resolution in Sri Lanka

The interview questions also focused on the invoking responses from the interviewees in relation to the resolution of the environmental disputes in Sri Lanka. Considering that all the respondents are closely involved in environmental dispute resolution, the responses were practical and therefore provides a realistic point of view from lived experience relating to environmental dispute resolution.

The respondents who are non-state sector entities were dispute resolution experts and three of the six interviewees are legal practitioners specializing in environmental dispute resolution in Sri Lanka. To the questions relating to what the most common form of environmental dispute resolution in Sri Lanka, the unanimous response from all respondents was that the most common form of environmental dispute resolution practiced in Sri Lanka is Litigation.

One of the respondents who is a senior legal practitioner with over 25 years' experience, stated that certain public interest groups have tried to introduce Environmental Mediation as a conventional dispute resolution method in Sri Lanka but has not been able to establish this properly. He stated that while there is a fully functional Mediation Unit in the Ministry of Justice with a reach to Grama Niladhari Division level, these

Units are not equipped with the knowledge or the resources to effectively become an environmental dispute resolution mechanism in its current form. He went on to say that in his opinion, while there is great potential in using this existing mechanism, the reason that litigation is selected as a dispute resolution method currently is because of the role that the courts have had to play in the resolution of environmental issues in the country in the absence of an alternative method.

One of the other respondents who was engaged in regulation and management as well as the resolution of environmental disputes, stated that currently such disputes are brought before the Magistrates Courts, Court of Appeal and Supreme Court in three different forms. He went on to elaborate that although environmental disputes use to be brought before Magistrates' Courts as Public Nuisance cases which were filed under the provision of Section 98 the *Code of Criminal Procedure* (Act No. 15 of 1979 as amended), these matter have in the recent past been brought mostly before the Supreme Court (as Fundamental Rights applications) and Court of Appeal (as Writ applications).

Other respondents had similar general views that with rapid development, disputes between development and the people have risen and the parties have increasingly turned to the courts to operate as an arbiter in resolving these disputes.

One of the respondents who engages in regulation and management of environmental disputes, was of the view that, although the Sri Lankan judiciary has not only provided redress to these disputes but has also set standards and given direction, litigation is not always the best way to resolve these issues. He elaborated that one of the most significant causes of environmental disputes is the problem of non-compliance to the procedures within the law. He is of the view that failure to follow procedure can be because of one of two things. One, is that there is full awareness of the requirements but there is intentional avoidance of the long-drawn approval processes. The other cause, he stated, is where there is a genuine lack awareness of the required processes and has not been properly guided by the relevant authorities. Wherever the non-compliance is intentional, penalization should be mandatory and litigation has been the accepted form of dispute resolution. However, he goes on to state that, where non-

compliance is due to not having been adequately informed of the due procedure to follow, it would be unfair to have the relevant parties penalized for such failure due to lack of diligence on the part of the mandated authorities. In such situations, litigation would prove to be a long and expensive form of resolution where the party in question stands to face economic loss unfairly.

The view that litigation as the only form of dispute resolution is not the best option was also reflected in the responses of another respondent, who is a Senior Counsel in a number of public interest cases – fundamental rights and writs. He was of the view that even though significant environmental issues are brought before the courts, the majority Judges are unaware of the nature of environmental disputes and its nuances. He went on to elaborate that this setback is because environment related area of study is not a compulsory in the Law College and in the Law Faculties, and therefore, one can become a Judge having never studied the subject.

One of the respondents also stated that in his view, one of the problems encountered with environmental disputes coming before the Judiciary, is the delays and that not all judges are empowered with the knowledge of environmental disputes as this is a very specialized area. Considering these hurdles, there are circumstances where certain environmental issues have been aggravated by the fact that the courts have followed the black letter law and technicalities where decision have been made to the detriment of the environment.

One of the respondents who is also a legal practitioner also presented a view point that environmental dispute resolution by the Judiciary has provided a number of important judicial decisions on environmental protection and in public interest. He was of the view that the active participation of the courts in environment-related dispute resolution has helped to curtail environmental pollution and destruction of natural resources. Also, additionally he stated that the Supreme Court has held that the *audi alteram partem* rule or ‘the right to be heard’ as an important ground on which writs of *certiorari* can be issued and it is also a part of Article 12(1) of the Constitution which is used in environmental matters. He stated that further exploration of the relevant case would

provide better insight on this point. The researcher will be substantiating this point during the analysis of this research with secondary sources. He stated that there were instances where environmental protection was strengthened and empowered by significant decisions in court. He drew attention to a number of cases such as cases relating to sand mining (*Hettiarachchige Don Chrishan Priyadarshana Wijewardena v Geological Surveys and Mines Bureau*), air pollution (*Geethani Wijesinghe v Hon. Patali Champika Ranawake, Minister of Environment and Natural Resources*) and noise pollution (*Al Haj M.T.M.Ashik v R.P.S. Bandula, OIC Weligama*) which showed how litigation has been successful in preventing, reducing, managing and controlling the impacts of development on the environment. However, he also pointed out that there are also some significant cases where the judiciary and the legal regime has failed to regularize major development projects to prevent environmental disputes as well. He referred to the Supreme Court Case *Marsalin Siril Alexander and three others v Ceylon Electricity Board and eight others*, SC (FR) 282/16, as significant because it demonstrated the need to balance the development process with the safety of the environment. Case was filed in 2016, and in 2017, the Supreme Court issued a directive stating that the parties should enter into a discussion with objective of entering into a settlement on the mitigatory environmental measures. He went on to state that this case is significant because, while the basic dispute resolution method utilized in this case is that of litigation, it also has the characteristics of a Court-mandated mediation or intervention for an environmental dispute.

4.3.2.3 Application of ADR Methods in Environmental Dispute Resolution

The interview focused also on the possibility of applying Alternative Dispute Resolution (ADR) methods in environmental dispute resolution in Sri Lanka. One of the respondents had a positive opinion of this aspect and was of the view that there are no logical barriers to the possibility of engaging ADR to resolve such disputes. He also stated that environmental disputes are essentially private or public interest. He stated that although environmental disputes which are of private interest relates to damage to a group or individual's person or property resulting from a development activity which causes environmental damage and in contrast environmental disputes which are of public interest arises from the impacts of development on the environment as a whole

affecting the public. In both categories of environmental disputes, the environmentally damaging activity or the development activity itself is the cause of the dispute and thus needs to be addressed in kind. However, if during the dispute resolution of the matter, the concerned activity itself is left unchecked, the severity of the damage may eventually result in the loss of essential environmental utilities which are central to the functions of ecosystems providing us ecosystem services. In environmental disputes the issues are quite site specific and / or may be concerned with general issues of policy. Therefore, the resolution of these should be flexible as much as possible to invoke the results that benefit both the development and environment.

One of the respondents who engages in regulation and management of disputes, was of the view that dispute resolution should accommodate ADR but should also be considered in relation to the broader framework of existing legislative and administrative processes.

The respondent who is a President's Counsel who also specializes in a form of ADR, was of the view that ADR model should be formalized as an Environmental Dispute Resolution method in Sri Lanka taking the existing such models in countries like the United States, Canada and many other countries, as examples and creating a localized model suitable for Sri Lanka. These statements are substantiated in the analysis of these research findings.

4.3.2.4 Recommendations for Application of ADR in Environmental Dispute Resolution

One of the respondents who is also an Arbitration specialist, recommended an Arbitration model consisting of a Statutory Tribunal which essentially would have the flexibility of a mediation but would be enacted by statute. He explained that this could be a model where an arbitrator would be appointed by a State authority, and the statute could set out the qualifications of that person who would be competent in the subject of environmental law and is empowered to hear such matters before him/her. And this model could consist of a committee with representatives of not only the legal profession but also administrative, finance, economic, as well as members of the civil society. This

is beneficial even in a situation where the matter is still brought before a court of law, the Court will be aided by the proceedings of and/or the decision taken by the Tribunal by a panel who is conversant with the subject. He further explained that although there is no such model available in the existing dispute resolution system in Sri Lanka, this is a practical alternative dispute resolution model which can be introduced.

The same respondent stated that there would be an advantage of an ADR model being introduce as this could help reduce the large number of environment related issues going before the Supreme Court and Court of Appeal. This would be because, these two Court would discourage an application to these courts, if there is an alternative remedy. If an alternative method is formulated, then cases relating to environmental matters can be directed to this alternative method. He was also of the view that in a situation where matters cannot be resolved through an ADR method, litigation should be the last resort.

Another respondent also made a recommendation, suggesting the introduction of the alternative dispute model of Mediation as an environmental dispute resolution. He was of the view that environmental mediation should be introduced at various strategic points in the project cycle of a development project. One of the features of this recommended model by him is to incorporate environmental mediation and dialogues as a necessary prerequisite to obtaining environmental clearances at the design phase. Similarly, he suggested to include such environmental mediation in the subsequent construction and operational phases as a prerequisite to renewals of permits and other licenses. This, he went on to state, is slightly different to the already existing environmental considerations that are part of the development sector in Sri Lanka which is in relation to the Environmental Impact Assessment (EIA) processes which act as a prerequisite to obtaining approvals. He stated that the National Environmental Act (NEA) No. 47 of 1980 (as amended) provides that, Project Approving Agencies should obtain an Environmental Impact Assessment report (EIA) for prescribed project for development activities. Also, that the Environmental Protection License (EPL) process is a useful tool in assessing the impact of development projects. He was of the view that at the inception, the EIA process was more or less a learning curve for the regulatory

authorities, practitioners and for the general public. Projects such as the Aitken Spence Kandalama hotel, the Colombo Katunayake Expressway project, The Southern Expressway, the Upper Kothmale Hydropower project etc., were useful experiences in the establishment of the process in its early years. He elaborated that the EIA reports which are a prerequisite to being granted approval to proceed, are expected to have assessments of the impacts of the project on the environment before the project has entered its life cycle. However, he stated, that this was a one-time assessment which only predicts the impacts in the stages of the project rather than a continuous assessment of the impacts as the project rolls out. Therefore, he suggests the mediation process to be incorporated so that development could progress unhindered while dealing with environmental issues before they escalate into full blown environmental disputes.

The above recommendations were also further accompanied by the opinion of another respondent that such methods should be embedded into the wider structures of environmental governance and participatory approaches to environmental dispute management. The respondent who was engaging in regulation and management of environmental disputes, was of the view that ADR in Environmental Dispute resolution cannot become a substitute for the formal adversarial methods of dispute resolution of litigation but should only be a supplementary method, which essentially would become a hybrid process of dispute resolution.

4.3.3 Questionnaire

This questionnaire of statements received a sample size of twenty-four respondents and the responses are analyzed using SPSS data analysis tool and briefly discussed in the following sections. The rating assessments of data analysis of responses for the statements in the questionnaire are as follows;

Rating of opinion	Level of Agreement
1	Strongly disagree
2	Disagree
3	Agree
4	Strongly Agree
5	Undecided

In this Rating format; Strongly Disagree, Disagree responses are considered as Negative responses, Undecided responses are considered as Neutral responses and Strongly Agree, Agree are taken as Positive responses in the analysis. Analysis is carried out statement wise to interpret the responses. The data findings are presented as below.

The questionnaire consisted of ten statements designed to invoke a positive, negative or neutral response from the respondents.

These statements were formulated in line with the research objectives which are;

- To identify the underlying causes of environmental disputes in Sri Lanka,
- To assess the effectiveness of dispute resolutions methods used to settle such environmental disputes in Sri Lanka,
- To confirm the applicability of alternative dispute resolution methods for environmental disputes in Sri Lanka,
- To propose recommendations to improve dispute resolution mechanism for settlement of environmental disputes in Sri Lanka.

4.3.3.1 Statement 1: "Environmental impacts are given insufficient consideration by the regulatory authorities."

For this statement out of 24 respondents, there were 19 positive responses while five respondents disagreed. Of the respondents those who agreed with this statement were a combination of experts from the development sector, regulatory authorities, academics, environmental law, conservation and activists. Of these while majority agreed to the

statement that environmental impacts don't receive sufficient consideration by the relevant authorities, a few practitioners in environmental conservation disagreed with this.

4.3.3.2 Statement 2: "The impacts of the development projects on the expected benefits for the communities from the project causes environmental disputes"

Out of 24 respondents, 23 respondents Strongly Agree with the statement. Overall, the majority agreed on the statement and have responded positively that the impacts of a development project must be studied against its expected benefits as these become causes for disputes. Therefore, it could be considered a statement that experts in the field agreed to.

4.3.3.3 Statement 3: "Litigation (adversarial form) is the only form of environmental dispute resolution in Sri Lanka"

This statement invoked a majority negative response as 19 out of 24 respondents Disagreed or Strongly Disagreed with the statement. Overall, the majority respondents did not agree that litigation was the only form of environmental dispute resolution in Sri Lanka. The respondents who are mainly engaging in environmental field in the country did not see this as the only form for resolution of such disputes.

4.3.3.4 Statement 4: "Alternative Dispute Resolution (ADR) is recognized as a dispute resolution method in environmental negotiations in Sri Lanka"

For this statement 14 out of 24 respondents have agreed with it while only 3 respondents have disagreed. 7 respondents remained undecided. Therefore, a larger majority of this composition of respondents agreed that ADR is a recognized dispute resolution method in environmental disputes in Sri Lanka. However, it is significant that those who have respondent negatively to this statement are mostly environmental law experts and this would mean that although generally the respondents would agree that ADR is recognized in Sri Lanka as a whole, these experts disagreed or remained undecided.

4.3.3.5 Statement 5: "ADR is effective in settling environmental disputes in Sri Lanka"

This statement invoked 19 positive responses from the 24 respondents and 4 respondents remained undecided. While a larger majority is in agreement that ADR is effective.

4.3.3.6 Statement 6: "ADR can be used during policy-making and planning or even once disputes have crystallized over administrative decisions (e.g. permitting, licensing etc.), or even after disputes have entered adjudication (adversarial form)"

This statement received 21 positive responses out of the 24 respondents over all. While there were 3 respondents who remained undecided, there was no negative responses from any of the respondents.

4.3.3.7 Statement 7: "ADR is not a substitute for statutorily-mandated decision-making by regulatory authorities but should be a supplement to the formal decision making is required by law."

This statement received 23 positive responses out of the 24 respondents over all. This statement too had one respondent, who remained undecided, there was no negative responses from any of the respondents.

4.3.3.8 Statement 8: "ADR should be created as a dispute handling system enabled by statute or regulation"

Out of the 24 respondents over all, this statement received positive responses from 22 who were of the view that new year. This statement too had one respondent, who remained undecided, there was no negative responses from any of the respondents.

4.3.3.9 Statement 9: "ADR should be a supplementary mechanism to formal adversarial system of dispute resolution such as litigation (a hybrid mechanism)"

This statement was also positively endorsed by 21 out of the 24 respondents over all. There were however those who were unable to reach a decision. But because of the majority responses, it can be stated that this statement is positively endorsed.

4.3.3.10 Statement 10: "ADR incorporated at rational points of the development project cycle is more effective in preventing environmental disputes."

This statement too had the positive responses from 23 out of the 24 respondents over all. The respondents being selected group of individuals who have engaged in the area of environmental disputes and resolution in various forms, endorsed the statement as a possibility.

4.4 Research Analysis

4.4.1 Introduction

The research analysis section analyzes the findings as discussed in the previous section. This section will analyze the resolution of environmental disputes in detail, recommendations made by the primary data sources and suggest probable reasons with reference to environmental dispute resolution in other countries as discussed in the literature review. Analyzing the data from secondary sources, the researcher followed the steps as stated according to Stewart (1993), in order to determine the appropriate match of a dataset to a research investigation (Stewart & Kamins, 1993). The recommendations are more elaborated in Chapter Five.

4.4.2 Analysis of Identifying Environmental Disputes

Environmental disputes in Sri Lanka vary and can be categorized into major areas of degradation and pollution as described by the United Nations Environmental Programme (UNEP) / EFL handbook on environmental law for the Sri Lankan judiciary and categorizes them into the major areas of pollution and degradation. Issues varying from air, water, soil and noise pollution, natural resource management issues relating to extraction and exploitation, energy generation, waste management, natural disasters and biodiversity loss, all of which contribute to the degradation of the environment. Environmental degradation is a culmination of these identified challenges and refers to the depletion of potentially renewable resources by utilizing it faster that it is naturally replenished. De Mel and Sirimanne (EFL, 2009) identifies different forces as contributing to environmental degradation.

Inferring from all the interviews combined it was emphasized that environmental degradation through human induced activities on development is a culminated environmental issue in Sri Lanka. Further to this it was revealed that while development is a necessity for the country, unregulated development has caused pollution and over exploitation of resources. The research findings further emphasized that the destruction of forest and wildlife reserves as a result of development is predictable environmental issue. The culminated opinions of the interviewees on the environmental issues that cause environmental disputes in Sri Lanka can be construed as a combination of land and forest degradation, pollution of air, water, soil and noise as well as habitat loss caused by development.

In the light of the research findings based on the secondary sources it is also evident that in countries such as India, Canada, the United States and Europe all encounter similar combination of environmental issues which invariably culminate into disputes. In India, Chandappa and Ravi (2009) identifies forest and agricultural degradation of land, resource depletion (such as water, mineral, forest, sand, and rocks), environmental degradation, public health, loss of biodiversity, loss of resilience in ecosystems, livelihood security for the poor as major environmental issues in India. Similarly, in the cases of Canada and the USA, it can be deduced that environmental degradation and pollution caused by industrial development contributes to the aggravation of climate change impacts and results in large numbers of populations living in urban areas where the air is notoriously poor in quality. In Europe as well, had identified, energy production/acid rain, nuclear power/waste, air pollution/climate, heavy metals, pesticides, water pollution, solid waste, and unforeseen accidents as main environmental problems in Europe. Also, climate change, stratospheric ozone depletion, the loss of biodiversity, major accidents, acidification, tropospheric ozone and other photochemical oxidants, the management of freshwater resources, forest degradation, coastal zone threats and management, waste production and management, urban stress and chemical risk are some of the main environmental issues faced by Europe (Andersson et al., 1992).

Another point raised in interviews on the causes of environmental issues arising and becoming disputes, it can be construed that that most of the environmental issues they have encountered that culminates to disputes are caused by the lack of adherence to existing environmental safeguards as well as failure on the part of the relevant authorities in managing and regulating projects at the inception. While the opinion of some respondents is that non-compliance of these safeguards is a common cause for the environmental disputes, there were contrasting opinions that the apparent non-compliance was not always intentional and there were instances where non-adherence was due to the lack of adequate guidance from the regulatory authorities. Another point deduced by the data findings relating to Sri Lanka, is that one of the reasons for the lack of compliance is the time constraints of obtaining the relevant environmental clearances is rarely considered in the initial planning and designing in development projects. This results in additional time and cost when the procedures relating to environmental safeguards are encountered which in turn results in environmental disputes which hinder the development process.

In India as well, a number of studies and literature has depicted human induced activities such as rapid burning of fuelwood and biomass such as dried waste from livestock as the primary source of energy, lack of organized garbage and waste removal services, lack of sewage treatment operations, lack of flood control and monsoon water drainage system, diversion of consumer waste into rivers, cremation practices near major rivers, government mandated protection of highly polluting old public transport, and continued operation by Indian government of government-owned, high emission plants built have been identified as major source of pollution and that air pollution, poor management of waste, growing water scarcity, falling groundwater tables, water pollution, preservation and quality of forests, biodiversity loss, and land/soil degradation are some of the major environmental issues India faces today. Different authors have emphasized that the growing populations in India escalating rapid urbanization causes environmental pollution which causes disputes with the development and health and safety of the populations (Chabukdhara & Nema 2012; Chabukdhara et al., 2016; Kandlikar et al., 2000; Tockner et al., 2002; Hamner et al., 2006; Sushil et al., 2006).

Similarly, in the cases of Canada and the USA, it can be deduced that environmental degradation and pollution caused by industrial development contributes to the aggravation of climate change impacts and results in large numbers of populations living in urban areas where the air is notoriously poor in quality. The federal states of the USA have come across situations where government itself have made attempts to override the existing laws and regulations for clean energy and energy efficiency policies. In Canada also the water usage and damming of rivers for development has devastating impacts on the ecosystems which provide services to populations. From the scrutinizing of secondary sources, it can be deduced that issues like coal-burning power plants that emit nitrogen oxides and volatile organic compounds that react to produce high-levels of ozone-causing smog are disproportionally located in these communities. As a result, these communities often suffer from higher rates of asthma and other adverse health effects.

In Europe as well it is states that air pollution is now the biggest environmental risk to public health and that governments are failing to adequately deal with the crisis as the EU Court of Auditors has found. It is stated that Europe's air pollution limits are "much weaker" than WHO guidelines – and most EU countries do not comply with them anyway. Also, that toxic air kills an estimated 400,000 Europeans before their time each year – up to 40,000 of them in Britain. But the UK government has been in breach of EU air quality limits since 2010 and now faces multimillion-pound fines at the European court. The European Commission has been taking action against EU countries breaching EU environment law and lists 229 of these infringement cases as ongoing since 2010 to date (Neslen, 2018).

Further to this, in relation to Sri Lanka, is can be deduced that the lack of monitoring by the regulatory authorities gives leeway for non-adherence to the laws and regulations. It was also emphasized that though the regulatory authorities have a fundamental duty towards the imposing environmental safeguards in development, there is also a level of due diligence expected from the developers to make relevant considerations in the project designs. Further to this it was revealed that, lack of resources to maintain diligent monitoring and political and other influences plays a role

in the failure of regulatory authorities to impose environmental safeguards more emphatically in development. Such imposition would have been a catalyst in preventing the escalation of environmental issues that lead to disputes.

Therefore, it can be concluded that while Sri Lanka is facing environmental issues that vary from pollution to degradation to over exploitation of resources. Pollution generally includes the elements of air, water, soil and noise and degradation is a combination of land and forest destruction as well as habitat loss. The common opinion of the respondents was that while there is a need to continue to encourage the development sector to practice due diligence, it is just as important to resolve these disputes when they occur in a manner which doesn't hinder the progress of the country.

4.4.3 Analysis of Environmental Dispute Resolution in Sri Lanka

As per the research findings the most common form of environmental dispute resolution in Sri Lanka is Litigation. From the interviews it can be deducted that, although there were attempts to introduce Environmental Mediation as a conventional dispute resolution method in Sri Lanka but has not been able to establish this properly. While there is a fully functional Mediation Unit in the Ministry of Justice reaching to Grama Niladhari Division level, these Units are not equipped with the knowledge or the resources to effectively become an environmental dispute resolution mechanism in its current form. However, despite the great potential to utilize this existing mechanism, the reason that litigation is selected as a dispute resolution method currently is because of the role that the courts have had to play in the resolution of environmental issues in the country in the absence of an alternative method. From the primary data research findings, it can be inferred that currently such disputes are brought before the Magistrates Courts, Court of Appeal and Supreme Court in three different forms. He went on to elaborate that although environmental disputes use to be brought before Magistrates' Courts as Public Nuisance cases which were filed under the provision of Section 98 the *Code of Criminal Procedure* (Act No. 15 of 1979 as amended), these matter have in the recent past been brought mostly before the Supreme Court (as Fundamental Rights applications) and Court of Appeal (as Writ applications).

Exploring this aspect more elaborately from the secondary data sources, it can be deduced that the law of nuisance and the environment is closely linked and nuisance is concerned with the maintenance of the health and safety of individuals as well as the general public. Since public nuisance is a criminal offense under criminal law, the Code of Criminal Procedure empowers the Magistrates to make conditional orders with regard to environmental matters that are capable of causing an obstruction or a nuisance in order to prevent any further damage being caused to the environment. Because of this provision, it has been one of the most commonly used methods of resolving disputes arising from development activities which cause obstruction or nuisance to the public. These provisions are subject to the provisions of the *Penal Code* (No.2 of 1883 as amended) which provides that

> "*a person who does any act, or is guilty of an illegal omission, which causes any common injury, danger or annoyance to the public or to the people in general who dwell or occupy property in the vicinity, or which must necessarily cause injury, obstruction, danger, or annoyance to persons who may have occasion to use any public right*", is guilty of a 'public nuisance'.

Therefore, the provisions of the Code of Criminal Procedure Act have been used by the courts together with Section 261 of the Penal Code to deal with disputes arising from environmental pollution and damage. While the provisions of the Penal Code and the Code of Criminal Procedure Act are not inter-dependent, in *Saram v Seneviratna*, De Sampayo, J observed that 'the Penal Code provides for the punishment of certain nuisances as offences, and the provisions of the Criminal Procedure Code appear to be only supplementary'. However, Section 261 of the Penal Code also provides that a public nuisance is not excused on the grounds that it causes some convenience or advantage. In situations such as explored in this research, this would become relevant where the project proponent of a development project takes up the defense that its implementation is of some advantage to the public at large. Violation of environmental laws and regulations invariably result in causing damage to health and safety of the people which in turn invokes the need for compensation and the halt of the wrongful actions.

In addition to this, environmental disputes have increasingly become the subject of fundamental rights applications in Sri Lanka. These cases have also been brought before the Supreme Court within the ambit of expressed fundamental rights in the Constitution, particularly under Article 12(1) which states that 'All persons are equal before the law and are entitled to the equal protection of the law'. Section 126 of the Constitution makes provisions for the procedure for filing fundamental rights applications, and provides that 'any person' claiming that his/her fundamental right has been, or is to be infringed by executive or administrative action, may file action in person or by an Attorney-at-Law on his/her behalf (Article 126(2) of the Constitution. United Nations Environment Programme (UNEP) defines Environmental Rights as "any proclamation of a human right to environmental conditions of a specified quality" (UNEP, 2019). According to UNEP human rights and elements of the environment are intertwined. It is considered that human rights cannot be "enjoyed without a safe, clean and healthy environment" and further to this the UNEP also defines that sustainable environmental governance cannot exist without the establishment of and respect for human rights". With this interrelation being recognized internationally, over 100 constitutions around the world enshrines the right to a healthy environment. As stated by Boyle (2012) as the principle of the 1992 Rio Declaration in the Vienna Declaration of Human Rights, Paragraph 11 also emphasizes that the right to development must be met to meet the needs of environmental and development needs of present and future generations. This is the fundamental principle of sustainable development which plays a significant role in resolving environmental dispute resolution.

When considering the legal system in Sri Lanka, there is no any specific definition provided regarding sustainable development. Further to this, even though a healthy natural environment is essential for basic human survival and well-being and there is no express 'right to clean and healthy environment' the Constitution of Sri Lanka, the method of judicial review, which counters out arbitrary decisions of the governmental authorities which causes environmental disputes, have facilitated the lack of constitutional provisions regarding environmental protection. However, under the concept of State Policy and Fundamental Duties in the 1978 Constitution, Article 27 (14) and 28 (f) specifically makes provisions regarding the environment. Article 27 (14)

expresses that “the state shall protect, preserve and improve the environment for the benefit of the community”. Article 28 (f) states that there is a fundamental duty on every person “to protect nature and conserve its riches”. The State is the trustee of the nation; hence it is a duty to protect the natural resources under a proper legal system. (Silva, Sachindrani, Hatharasinghe & Bogahawatte, 2015). Therefore, it is clear that the Constitution of Sri Lanka comprises of environmental based rights and principle of sustainable development under state policy and fundamental duties. Yet, there was a general set back that since the Sri Lankan Constitution does not explicitly recognize the right to a clean and healthy environment, a person may not be able to invoke the fundamental right jurisdiction of the Supreme Court to remedy an aggrievance caused by an environmental issue creating a dispute as it may not have a connection to any of the other fundamental rights recognized under the Constitution. This gap in the recognition of environmental rights was coupled with the fact that the fundamental right to life is also not expressly recognized in the Constitution. Whereas the negative form of right to life was expressed in Article 13(4), this was established in a positive form when Justice Fernando purposively interpreted that;

> *“Although the right to life is not expressly recognised as a fundamental right, that right is impliedly recognised in some of the provisions of Chapter III of the Constitution. In particular, Article 13(4) provides that no person shall be punished with death or imprisonment except by order of a competent court. That is to say, a person has a right not to be put to death because of wrongdoing on his part, except upon a court order. There are other exceptions as well, such as the exercise of the right of private defense which expressed positively, that this provision means that a person has a right to live, unless a court orders otherwise….” (Sriyani Silva v Iddamalgoda" (2003)).*

In the case *Environmental Foundation Limited Vs Urban Development Authority of Sri Lanka and Others* (also known as the Galle Face Green Case) in 2004, the right to equality and the equal protection of the law under the Article 12 (1) was applied to establish a breach of citizens’ environmental rights. Article 12 (1) states “All persons are equal before the law and are entitled to the equal protection of the law”. The Supreme Court in the case of *Wattegedera Wijebanda v Conservator General of Forest*

and Others (2009) held that `even if environmental rights are not specifically alluded to, under the fundamental rights chapter of the Constitution, the right to clean environment and the principles of equity with respect to the protection and preservation of the environment are inherent in a meaningful reading of Article 12(1) of the Constitution'.

In contrast to this the right to life provisions of the Indian Constitution (under Article 21) is set out in a positive form and Rosencarnz expresses that the boundaries of the fundamental right to life and personal liberty guaranteed under the Indian Constitution extended to include the right to clean and healthy environment, by the courts recognizing unarticulated liberties implied by this Article. Based on this, the Supreme Court of India interpreted the right to life and liberty to include the right to a wholesome environment (Divan & Rosencranz, 2001). In addition to this it was observed that the judiciary-led legal developments in India were achieved by depending on the extraordinary powers of the Higher Courts (Abraham, 1999).

Despite the lacuna in the Sri Lankan Constitution of provisions for the protection of environmental rights, methods such as the process of judicial review can be invoked to seek the intervention of the courts' jurisdiction to aid in protecting the environment. Judicial review is a vital element of the principle of separation of powers, rule of law and constitutionalism ensuring that the State is made accountable to the courts. Judicial control in Sri Lanka established through Administrative law, developed principles such as proportionality, legitimate expectation, public doctrine and right to equality, by challenging the discretionary powers of public authorities through Writs and Fundamental Rights Applications (Udayanganie, 2015). With the emergence of welfare state, administrative agencies emerged with more power granted to them to carry out the wide range of functions consigned to them, which in turn required judicial interventions. The judicial intervention was warranted on broad principles of good administration. According to Hoffman, this concept establishes the idea that "a framework concept draws together a range of rights, rules, and principles guiding administrative procedures with the aim of ensuring procedural justice, public administration adherence to the rule of law and sound outcomes from administrative

procedures" (Hoffman, Rowe & Turk, 2011). This concept has developed in close relation to the rule of law and procedural justice in public administration. Although the concept of good administration is considered as a general principle and as a fundamental right under the European administration, the applicability of this concept in Sri Lanka would have been questionable as Sri Lanka is not a member state of the EU. But in cases like *Abdul Thasim vs. Edmond Rodrigo* (where is was held that the words 'according to law' in section 42 of the Court Ordinance directs the court to issue the writs according to English Law) and *Nakkuda Ali vs. Jayarathne* which establishes the applicability of English law in Sri Lanka. In this light, judicial review addresses the legality and not on the merits of a decision (Bell et al., 2013). Therefore, when pubic authorities make decisions that seriously impact the environment, judicial review of those decisions could go beyond the legitimate boundaries of the authority given to these bodies and refer back to the authority to reconsider the decision in question (Thilakarathna, 2019). While the Court of Appeal have the power of judicial review over decisions taken by state authorities, environmental judicial reviews are a new occurrence with its roots in UK where it is well documented (Moules, 2011). This follows its own procedures and methods of reviewing decisions of public authorities which directly impact the environment. In the current scenario, environmental concerns in Sri Lanka are dealt with both preventive as well as reactive measures which in its entirety is designed to render comprehensive protection of the environment.

In the past environment-related fundamental rights cases were filed with the individuals affected by the issue as petitioners, while being funded and assisted by environmental organizations. One such example is the *Eppawala Case* (2000), where the petitioners were the people in the Eppawala area but legally assisted by the Environmental Foundation Limited (EFL). Since corporate bodies incorporated in Sri Lanka has been recognized as legal 'persons' or 'citizens' for the purpose of fundamental rights jurisdiction, EFL in 2004 filed the *Galle Face Green case* in its own name on behalf of the general public. Even though objections were taken on *locus standi*, these objections were overruled by the Supreme Court which went on to give a judgement in favour of EFL. Similarly, the Supreme Court has allowed organizations like EFL to intervene in environment-related cases filed by private parties. One such case was *Al Haj*

M.T.M.Ashik v R.P.S. Bandula, OIC Weligama (Noise Pollution Case) where EFL, though not a party to the case, was permitted to intervene as amicus curiae on behalf of the public.

In addition to this the Writ Jurisdiction of the Court of Appeal has also been invoked in environment-related cases as this is one of the principle safeguards conferred by the Constitution against the excess and abuse of executive powers. This is linked to the Doctrine of Public Trust, to effect that '*power vested in the public authorities are not absolute and unfretted but are held in trust for the public, to be exercised for the purpose of which they have been conferred, and that their exercise is subject to judicial review by reference to those purposes'* (*Heather Therese Mundy v Central Environmental Authority*). The Writs of *certiorari,* prohibition and *mandamus* are the writs that are most commonly invoked in environment-related cases. Subsequent to the case of *Wijesiri v Siriwardene* where the right of a petitioner to file a writ application in the interest of the public was confirmed, the writ jurisdiction of the Court of Appeal has been invoked frequently by individuals and environmental organizations in environmental dispute resolution. Also, as most of the conservation laws have provisions for invoking the jurisdiction of the Magistrates Court for the violation of its provisions, litigation has been the most common form of environmental dispute resolution method in Sri Lanka. The Supreme Court has held that the *audi alteram partem* rule or 'the right to be heard' is an important ground on which writs of *certiorari* can be issued and it is also a part of Article 12(1) of the Constitution which is used in environmental matters. In the case of *Gunaratne v Homagama Pradeshiya Sabha* (1998), the right to be heard or the right to a hearing was the grounds on which the decision of the Homagama Pradeshiya Sabha to cancelled permission given to the petitioner of the case to establish a saw mill at a particular location without a prior hearing given, was held to be 'arbitrary'. This is as the duty to hear both sides to an environmental dispute is an essential principle of administrative fairness and the failure on the part of a public authority to adhere to this principle is grounds enough to institute an application for writ of certiorari to the Court of Appeal or to the Provincial High Court with Appellate jurisdiction depending on the subject matter.

The fundamental rights case of *Gunaratne v Homagama Pradeshiya Sabha* mentioned earlier could have been dealt with under the writ jurisdiction of the Court of Appeal as well. The principle upon which the relevant public authority should operate when issuing or cancelling an Environmental Protection License (EPL) was defined by the Secretary to the Ministry of Environment in 1995 when in his written decision he held that not only has there been a procedural lapse in failing to give the petitioner (the industrialist in this case) a proper hearing preceding to the decision to cancel the EPL infringing the principles of natural justice (the *audi alteram partem* rule) but also observed that;

> *"The CEA and other delegated institutions have a legal duty to follow the principles of natural justice when issuing, suspending and cancelling environmental protection licenses. This does not mean that the CEA and such institutions have to conduct proceedings like a court of law. Natural justice and the duty to act judicially simply requires that the CEA and the institutions to which it has delegated that power must act 'fairly', giving affected parties a fair opportunity to place their case before the CEA/delegated institutions and making EPL decision only on relevant data, evidence and facts."*
>
> (See: *Appeal under Section 23E of the National Environmental Act by E.M.S. Niyas*, (1995) 2 S.A.E.L.R. 1) (South Asian Environmental Law Reporter)

Deducing from the findings of the primary data sources on the effectiveness of litigation as a resolution method for environment related disputes, the views included that, with rapid development, disputes between development and the people are inevitable and the public increasingly turns to the courts to operate as an arbiter in resolving these disputes. Some of the opinions were that the Sri Lankan judiciary has not only provided redress to these disputes but has also set standards and given direction, litigation is not always the best way to resolve these issues. There is evidence where environmental dispute resolution by the Judiciary has provided a number of important judicial decisions on environmental protection and in public interest. Active participation of the courts in environment-related dispute resolution has helped to curtail environmental pollution and destruction of natural resources. Some examples were where environmental protection was strengthened and empowered by significant decisions in court. Attention was drawn to a number of cases such as cases relating to sand mining

(*Hettiarachchige Don Chrishan Priyadarshana Wijewardena v Geological Surveys and Mines Bureau*), air pollution (*Geethani Wijesinghe v Hon. Patali Champika Ranawake, Minister of Environment and Natural Resources*) and noise pollution (*Al Haj M.T.M.Ashik v R.P.S. Bandula, OIC Weligama*) which showed how litigation has been successful in preventing, reducing, managing and controlling the impacts of development on the environment.

Further exploration of this revealed that according to the Article 126(4) of the Constitution, the Supreme Court is granted wide discretion 'to grant such relief or make such directions as it may deem just and equitable' in the circumstances of the case. The Supreme court did invoke this power in the above Noise Pollution case, when the Central Environmental Authority failed to formulate regulations concerning noise pollution after several sittings, the Court itself, exercising the powers of Article 126(1), formulated such regulations and directed the Police to enforce these regulations using their powers under Section 261 of the Penal Code and Section 80(1) of the Police Ordinance relating to the issue of permits for loudspeakers. In addition to this the scrutinizing of secondary sources also revealed that in situations where the development activity causing a dispute is not illegal nor dangerous per se, but the manner in which it is being implemented causes environmental disputes, where parties are receptive, the Court would encourage them to reach a settlement. One such case is the *Nawimana Case* (*Environmental Foundation Limited v Attorney General*, 1992), where subsequent to the Court granting leave to proceed, the Central Environmental Authority, in consultation with the parties involved (the quarry owner and residents in this case), proceeded to draw up a regime to control the times and frequency of the blasting operation. This settlement was then entered into the Court Records as an Order of the Court. However, there were questions of how effective litigation is in cases where the cause of environmental disputes is non-compliance. This is because failure to follow procedure can be because of one of two things. One, is that there is full awareness of the procedures but there is intentional avoidance of this processes. The other cause is where there is a genuine lack of awareness of the it and they have not been properly guided by the relevant authorities. Where non-compliance is intentional, penalization was mandatory and litigation has been the accepted form of dispute resolution.

However, more importantly where non-compliance is due to not having been adequately informed of the due procedure, it would be unfair to have the relevant parties penalized for such failure due to lack of diligence on the part of the mandated authorities. In such situations, litigation would prove to be a long and expensive form of resolution where the party in question stands to face economic loss unfairly.

While scrutinizing the secondary sources it was revealed that the case law in Sri Lanka relating to environmental disputes increased in numbers with some significant cases such as *Bulankulama vs. Secretary, Ministry of Industrial Development (SCFR Application No.884/99) (Eppawela Phosphate Mining Case), Sugathapala Mendis and other vs. C B Kumaratunga and others (SCFR No 352/2007) (Water's Edge Case), Environment Foundation Limited vs. Urban Development Authority (SCFR Application No 47/2004) (Galle Face Green Case),* and *Environmental Foundation Limited vs. The Land Commissioner (CA Application No 573/1992) (Kandalama Construction Case)* being some of the significant cases where court intervention prevented adverse impacts of development projects. However, there are also some significant cases where the judiciary and the legal regime has failed to regularize major development projects to prevent environmental disputes as well. Some of the major development project which have resulted in significant environmental issues are the Oma Oya Irrigation Project, Colombo Port City, and Norochcholai Coal Power Plant. All of these projects have significance in terms of the development requirements of the country. Yet these are also great examples of situations where the existing legal regimes have failed to prevent devastating impacts on the environment.

Uma Oya Project has resulted in devastating impacts on a large number of residents living along the Tunnel from Diaraba near Welimada to Kurundugolla near Wellawaya. The project was originally designed to generate electricity. However, it was consderied that there was a potential to bring water to dry parts of the Uva province. However, the progress of the project resulted in a number of issues relating to the environmental rights of the people impacted by the project. Neither litigation nor the relevant institutions were able to prevent the devastating impacts of this project while being implemented.

Colombo Port City is a major infrastructure facility in the Belt and Road Initiative (BRI) Project of China. It is considered as the third strategic point of the new trade route established by China since Sri Lanka is located along the east-west shipping line. In spite of its economic and social impacts, the environmental impacts have not been addressed as provided for in the prevailing laws in the country. The project which was to be carried out in three phases – dredging, reclamation and construction – the initial supplementary EIA only addressed dredging and not the cumulative impacts of the project. Ideally the cumulative impacts of the project should have been assessed and addressed in a single EIA at the beginning of the project approval process.

Norochcholai Coal Power Plant (NCPP) which was situated in the Kalpitiya Peninsula which was a fragile ecosystem to begin with where the communities mainly depended on agriculture with very limited fresh water resources. While the coal power plant has significance in meeting the energy needs of the country, it has over a period of time operated without monitoring by the relevant authorities and has resulted in devastating environmental issues for the communities in Narakkali and Illanthadiya villages in the close vicinity of the power plant. It has violated several environmental regulations in the country and has resulted in the communities experiencing adverse effects of the coal power plant along with loss of livelihoods, depletion of water resources, declining fish habitats as well as effects of haphazard dumping of Coal ash spreading fly ash and coal dust causing health issues.

This case relating to Norochcholai CPP was significant as this demonstrated the need to balance the development process with the safety of the environment. While two court cases were filed against the Coal power plant in 2006 and 2016, both in the Court of Appeal and the Supreme Court, the 2006 case was unsuccessful and the project continued to cause irreparable damages and impacts on the natural environment, the ecological balance and the interest of communities. However, in 2016, the matter of the environmental disputes caused by the operation of the NCPP was once again brought before the Supreme Court by the Environmental Foundation Limited (EFL) in the Supreme Court Case *Marsalin Siril Alexander and three others v Ceylon Electricity*

Board and eight others, SC (FR) 282/16 where the Petitioners (including from the communities in the villages in close vicinity) filed action against NCPP for causing health, economic, and environmental impacts. In 2017, the Supreme Court issued a directive stating that the parties should enter into a discussion with an independent Technical Review Committee (TRC) appointed by the Public Utilities Commission of Sri Lanka (PUCSL). The purpose of the TRC was to review operations of all major power plants monitoring their environmental and social impacts. The TRC meetings resulted in the formulation of the 'Implementation Plan for the Mitigation of Environmental Impacts caused by the Norochcholai Coal Power Plant' with a detailed action plan prepared in agreement with all committee members and submitted to Court. Which was to enter into a settlement on the mitigatory environmental measures. This case is significant because, while the basic dispute resolution method utilized in this case is that of litigation, it also has the characteristics of a Court-mandated mediation or intervention for an environmental dispute.

Therefore, it could be concluded that while litigation as a dispute resolution method has been considered in environmental disputes, the possibility of having alternative dispute resolution methods would be beneficial to both development and the environmental safety.

4.4.4 Analysis of Application of ADR in Environmental Disputes Resolution in Sri Lanka

Deducing from the research findings there are no logical barriers to the possibility of engaging ADR to resolve environmental disputes. Development which causes environmental damage which are both in private and public interest needs to be addressed in kind. If left unchecked, the severity of the damage may eventually result in the loss of essential environmental utilities which are central to the functions of ecosystems providing us human ecosystem services. Also, in environmental disputes, the issues are quite site specific and / or may be concerned with general issues of policy. Therefore, the resolution of these should be flexible as much as possible to invoke the results that benefit both the development and environment.

The application of non-adversarial dispute resolution methods in environmental dispute resolution is successful in countries such as the USA and Canada. Environmental dispute resolution in the US can be traced to C.H.W. Foster (Foster, 1969) who suggested the use of conciliation to resolve environmental disputes in 1969. Environmental dispute resolution, or EDR, has been used in the United States since the early 1970s. Environmental issues gained widespread public and political attention in the 1970s in the United States. This was endorsed by Ford and Rockefeller Foundations which supported trial cases in the early 1970s. Constructing on the idea perceived by Foster, Cormick and McCarthy began to use mediation to resolve a dam dispute in the state of Washington. The Snoqualimie River Mediation became the first documented case of environmental mediation in 1973 (For a description of this case see Cormick G, 'Mediating environmental controversies: perspectives and first experiences' (1976) 2 Earth Law Journal. (215-224). The dispute relating to this Mediation arose with the decision to dam a flood-prone river which would have impacted the pristine wilderness of the area. The mediation was a success in that a consensus was reached by the parties where decision was made to dam a smaller portion of the land for the protection of the farmers while preventing the degradation of the environment. Later, the Storm King Mountain dispute provided more evidence that potentially expensive, lengthy environmental disputes might be better solved through mediation, rather than litigation (Bingham & Haygood 1986). Bingham defines environmental dispute resolution as "a variety of approaches that allow the parties to meet face to face to reach a mutually acceptable resolution of the issues in a dispute or a potentially controversial situation." With the emergence of alternative dispute resolution (ADR) as an alternative to handling disputes, these trends became merged in the new field of environmental dispute resolution (EDR), which grew to help avoid protracted environmental court battles. According to Peterson (1992) in 1987, the government made ADR an "agency-wide priority." The US government encouraged the regional offices to create mediation programs to resolve such environmental disputes. According to Melling (1995) after Exxon Valdez tanker ran aground in Prince William Sound, causing the largest oil spill in the history of the United States, Secretary of Interior raised the profile of government mediators by mediating the Alaska fishermen's battle with oil and gas companies. Since

that time, the Secretary has continued to mediate various environmental disputes around the country.

In the following years since this first environmental mediation recorded, countries such as Canada has also incorporated environmental mediation as an alternative dispute resolution method for environment related disputes. In addition to this environmental mediation has gained recognition from a number of treaties and international charters such as the United Nation Convention on Laws of the Sea (UNCLOS), Vienna Convention for Protection of the Ozone Layer and the WTO dispute Settlement Regime amongst others. In Canada, the use of ADR has not expanded as quickly or as broadly as in the United States. Not only is ADR a relative newcomer in Canada, but so is EDR and the environmental conflicts that call for its use. While there were, several environmental mediations in Eastern Canada in the 70s and 80s which the Vol. 4 of Canadian Environmental Law Association's (CELA) *Environmental Mediation - Theory to Practice,* lists and describes, environmental issues in Canada did not gain widespread attention until the 1990s. For federal environmental law, the first federal case of great environmental prominence in Canada was *the Friends of Oldman River Society v. Canada (Minister of Transport)* in 1990. The techniques used range from consensual processes like mediation to quasi-adjudicative techniques such as arbitration. Mediation is the technique most commonly used to resolve environmental conflicts in Canada. Mathers (1995) records that an early, prominent, regulatory "negotiating" process did take place in Western Canada during the 1980s regarding the Alberta Swan Hills hazardous waste disposal facility.

Considering that globally there is a trend to promote ADR as an effective tool for the resolution of environmental disputes, countries have made legislative efforts to establish environmental mediation as a method of dispute resolution. In 1998, United States enacted the Environmental Policy and Conflict Resolution Act of 1998 and created the United States Institute for Environmental Conflict Resolution. In 2002, the EU advocated for the 6th Environment Action Programme of the European Community (2002-2012) for active use of mediation in environmental disputes within the EU countries. Israel recognized and established a Joint Environmental Mediator training

program which employed both Israeli and Palestinian mediators. Even though there is no guarantee that mediation would instantly resolve all environmental disputes, considering the method already used and the advantages of mediation as opposed to the traditional forms of adversarial dispute resolution, it is a viable method to resolve environmental disputes that arise from development.

It was also inferred that dispute resolution should accommodate ADR but should also be considered in relation to the broader framework of existing legislative and administrative processes. ADR methods should be embedded into the wider structures of environmental governance and participatory approaches to environmental dispute management. However, it was also opinioned that ADR in Environmental Dispute resolution cannot become a substitute for the formal adversarial methods of dispute resolution of litigation but could be an imperative supplementary method, which essentially would become a hybrid process of dispute resolution. ADR models could be formalized as Environmental Dispute Resolution method in Sri Lanka taking into consideration such existing models in countries like the United States and Canada as examples, and creating a localized model suitable for Sri Lanka. The techniques used in these countries range from consensual processes like mediation to quasi-adjudicative techniques such as arbitration.

4.4.5 Analysis of Recommendation for Environmental Disputes Resolution in Sri Lanka

Deducing from the research findings from primary sources, recommendations were made to introduce an Arbitration model consisting of a Statutory Tribunal which essentially would have the flexibility of a mediation but would be an enacted by statute. This is substantiated by the existence of such in in the countries focused in this research. It was suggested that this model could be a quasi – adjudicative method, where an arbitrator can be appointed by a State authority, and the statute could set out the qualifications of that person who would be competent in the subject of environmental law and is empowered to hear such matters before him/her. This was in line with the opinion that ADR in Environmental Dispute resolution cannot become a substitute for the formal adversarial methods of dispute resolution of litigation but could be an

imperative supplementary method, which essentially would become a hybrid process of dispute resolution. The suggested model could consist of a committee with representatives of not only the legal profession but also administrative, finance, economics, as well as members of the civil society. This is beneficial even in a situation where the matter is still brought before a court of law, the Court will be aided by the proceedings of and the decision taken by the Tribunal by a panel who is conversant with the subject. He further explained that although there is no such model available in the existing dispute resolution system in Sri Lanka, this is a practical alternative dispute resolution model which can be introduced. This was also suggested as there could an advantage of an ADR model being introduce, as this could help reduce the large number of environment related issues going before the Supreme Court and Court of Appeal. With the introduction of an ADR system, the two Court would discourage an application made to these courts, if there is an alternative remedy. If an alternative method is formulated, then cases relating to environmental matters can be directed to this alternative method. It is also deduced that in a situation where matters cannot be resolved through an ADR method, litigation should be the last resort. These recommendations were also further accompanied by the opinion of another respondent that such methods should be embedded into the wider structures of environmental governance and participatory approaches to environmental dispute management.

Another ADR model recommendation in the research findings was to introduce alternative dispute model of Mediation, which is a consensual process, as an environmental dispute resolution. The suggestion was to introduce environmental mediation at various strategic points in the project cycle of a development project. One of the features of this recommended model was to incorporate environmental mediation and dialogues as a necessary prerequisite to obtaining environmental clearances at the design phase. Similarly, to include such environmental mediation in the subsequent construction and operational phases as a prerequisite to renewals of permits and other licenses. This is slightly different to the already existing environmental considerations that are part of the development sector in Sri Lanka which is in relation to the Environmental Impact Assessment (EIA) processes which act as a prerequisite to obtaining approvals. The National Environmental Act (NEA) No. 47 of 1980 (as

amended) provides that Project Approving Agencies should obtain an Environmental Impact Assessment report (EIA) for prescribed project for development activities. Also, that the Environmental Protection License (EPL) process is a useful tool in assessing the impact of development projects. It was deduced from the research findings that at the inception of the presentation of the EIA process was more or less a learning curve for the regulatory authorities, practitioners and for the general public. Projects such as the Aitken Spence Kandalama hotel, the Colombo Katunayake Expressway project, The Southern Expressway, the Upper Kothmale Hydropower project etc., were useful experiences in the establishment of the process in its early years. However, while EIA reports are a prerequisite to being granted approval to proceed and require assessments of the impacts of the project on the environment before the project has entered its life cycle, that this was a one-time assessment which only predicts the impacts of the project rather than a continuous assessment of the impacts as the project rolls out. Therefore, it was suggested, that a mediation process incorporated into the project cycles could be beneficial for development to progress unhindered while dealing with environmental issues before they escalate into full blown environmental disputes.

4.5 Chapter Summary

This chapter presented all the findings from the primary sources of interviews and questionnaire and the analyses of these the findings with the research findings from secondary sources including that from the literature review. The results show that there are environmental issues prevalent in Sri Lanka that culminate into environmental disputes and the current most used form of dispute resolution method is the adversarial form of litigation. However, the conclusion is that this form is not always the best method for dispute resolution and that there is provision to introduce Alternative Dispute Resolution (ADR) methods into the environmental dispute resolution regime and this would be an imperative supplementary method which essentially could take the form of a hybrid method. There is also provision to encourage the incorporation of a form of environmental mediation into development at strategic points in order for the process to be beneficial for development to progress unhindered and managing environmental disputes in a timely manner.

CHAPTER 05

CONCLUSIONS & RECOMMENDATIONS

5.1 Introduction

In this chapter the conclusions resulting from the findings of this study, on the application of ADR in environmental dispute resolution in Sri Lanka, are described. The conclusions were based on the purpose, research questions and results of the study. The implications of these findings and the resulting recommendations will also be explained. Recommendations were based on the conclusions and purpose of the study.

5.2 An Overview of the Research

This study was conducted as an exploratory, descriptive and contextual qualitative study. The researcher assumed a phenomenological approach to achieve the objectives of the study. Semi-structured, open, qualitative interviews were conducted with six experts in the area of environmental dispute resolution, who were purposively selected as participants and a questionnaire of statements was circulated among a selected group of thirty individuals with vast experience in environmental issues in Sri Lanka and twenty-four responses were obtained. The research findings were analyzed manually by the researcher to align with the research objectives and the data were amplified with secondary sources, including research findings from the literature review. Trustworthiness of the data was assured and ethical considerations respected (Lincoln & Guba 1985).

The findings and recommendations described below are centered on the experiences of the six participants, the problem question, the objectives and the data analysis.

The problem question to be answered was: “can alternative dispute resolution methods be used to settle environmental disputes in Sri Lanka”?

In answering this question, the study realized the following objectives:

- To identify the underlying causes of environmental disputes in Sri Lanka,

- To assess the effectiveness of dispute resolutions methods used to settle such environmental disputes in Sri Lanka,
- To confirm the applicability of alternative dispute resolution methods for environmental disputes in Sri Lanka,
- To propose recommendations to improve dispute resolution mechanism for settlement of environmental disputes in Sri Lanka.

5.3 Summary of Data

The findings of the research from primary and secondary sources were discussed according to the four research objectives and are as follows;

5.3.1 Environmental Disputes in Sri Lanka

Environmental disputes in Sri Lanka can be categorized into the major areas of pollution and degradation. These issues varying from air, water, soil and noise pollution, natural resource management issues relating to extraction and exploitation, energy generation, waste management, natural disasters and biodiversity loss, all of which contribute to the degradation of the environment (UNEP/EFL 2009). The destruction of forest and wildlife reserves as a result of development, land and forest degradation, pollution of air, water, soil and noise as well as habitat loss caused by development are significant environmental issues. Unregulated development emerged as a cause for pollution and over exploitation of resources. In the research findings there also emerged the fact that most of the environmental issues that culminate to disputes are caused by the lack of adherence to existing environmental safeguards and also due to the failure on the part of the relevant authorities in managing and regulating projects at the inception. This fact was revealed in the statements of the respondents engaging in regulation and management of environmental safeguards, where the non-compliance of these safeguards is a common cause for the environmental disputes that are related to development activities. However, it was also revealed that the apparent non-compliance was not always due to the lack of awareness of such safeguards but there have been instances where there were situations where adequate guidance has not been given by the regulatory authorities. Also, that not only does the regulatory authorities have a fundamental duty towards the imposing environmental safeguards in

development, there is also a level of due diligence expected from the developers to make relevant considerations in the project designs. Therefore, it can be concluded that while Sri Lanka is facing environmental issues that vary from pollution to degradation to over exploitation of resources. Pollution generally includes the elements of air, water, soil and noise and degradation is a combination of land and forest destruction as well as habitat loss. The common opinion of the respondents was that while there is a need to continue to encourage the development sector to practice due diligence, it is just as important to resolve these disputes when they occur in a manner which doesn't hinder the progress of the country.

5.3.2 Environmental Dispute Resolution in Sri Lanka

The most common form of environmental dispute resolution in Sri Lanka is Litigation. However, attempts have been made to introduce Environmental Mediation as a conventional dispute resolution method in Sri Lanka but has not been able to establish this properly. Although there is a fully functional Mediation Unit in the Ministry of Justice with a reach to all local level constituencies, these Units are not equipped with the knowledge or the resources to effectively become an environmental dispute resolution mechanism in its current form. It was revealed in the findings that there is great potential in using this existing mechanism, the reason that litigation is selected as a dispute resolution method currently is because of the role that the courts have had to play in the resolution of environmental issues in the country in the absence of an alternative method. Currently environmental disputes are brought before the Magistrates Courts, Court of Appeal and Supreme Court in three different forms. He went on to elaborate that although environmental disputes use to be brought before Magistrates' Courts as Public Nuisance cases which were filed under the provision of Section 98 the *Code of Criminal Procedure* (Act No. 15 of 1979 as amended), these matter have in the recent past been brought mostly before the Supreme Court (as Fundamental Rights applications) and Court of Appeal (as Writ applications). Due to rapid development, disputes between development and the people have risen and the parties have increasingly turned to the courts to operate as an arbiter in resolving these disputes. It was also revealed that although the Sri Lankan judiciary has not only provided redress to these disputes but has also set standards and given direction,

litigation is not always the best way to resolve these issues. While one of the causes of environmental disputes emerged as the problem of non-compliance to the procedures within the law, this is not always intentional. There are instances where there is a genuine lack awareness of the required processes and has not been properly guided by the relevant authorities. Wherever the non-compliance is intentional, penalization should be mandatory and litigation has been the accepted form of dispute resolution. However, where non-compliance is not intentional and due to the lack of diligence on the part of the regulator, it would be unfair to have the relevant parties penalized for such failure due to lack of diligence on the part of the mandated authorities. In such situations, litigation would prove to be a long and expensive form of resolution where the party in question stands to face economic loss unfairly.

Scrutiny of secondary sources also revealed that the case law in Sri Lanka relating to environmental disputes increased in numbers where court intervention prevented adverse impacts of development projects, but there are also some significant cases where the judiciary and the legal regime has failed to regularize major development projects to prevent environmental disputes as well. Some of the major development project which have resulted in significant environmental issues are the *Oma Oya Irrigation Project, Colombo Port City,* and *Norochcholai Coal Power Plant*. All of these projects have significance in terms of the development requirements of the country. Yet these are also great examples of situations where the existing legal regimes have failed to prevent devastating impacts on the environment. This case relating to Norochcholai CPP was significant as this demonstrated the need to balance the development process with the safety of the environment. Case was filed in 2016, and in 2017, the Supreme Court issued a directive stating that the parties should enter into a discussion with an independent Technical Review Committee (TRC) appointed by the Public Utilities Commission of Sri Lanka (PUCSL). The objective of the meetings was to formulate an implementation plan and to enter into a settlement on the mitigatory environmental measures.

This case is significant because, while the basic dispute resolution method utilized in this case is that of litigation, it also has the characteristics of a Court-mandated mediation or intervention for an environmental dispute.

5.3.3 Application of ADR Methods in Environmental Dispute Resolution

It was inferred in the research findings that there are no logical barriers to the possibility of applying Alternative Dispute Resolutions (ADR) to resolve environmental disputes in Sri Lanka. In environmental disputes, the issues are quite site specific and / or may be concerned with general issues of policy. Therefore, the resolution of these should be flexible as much as possible to invoke the results that benefit both the development and environment. The application of non-adversarial dispute resolution methods in environmental dispute resolution is successful in countries such as the USA and Canada. With the emergence of alternative dispute resolution (ADR) as an alternative to handling disputes, these trends became merged in the new field of environmental dispute resolution (EDR), which grew to help avoid protracted environmental court battles. According to Peterson (1992) in 1987, the government made ADR an "agency-wide priority." The US government encouraged the regional offices to create mediation programs to resolve such environmental disputes. In the following years since this first environmental mediation recorded in the US, countries such as Canada has also incorporated environmental mediation as an alternative dispute resolution method for environment related disputes. For federal environmental law, the first federal case of great environmental prominence in Canada was *the Friends of Oldman River Society v. Canada (Minister of Transport)* in 1990. The techniques used range from consensual processes like mediation to quasi-adjudicative techniques such as arbitration. Mediation is the technique most commonly used to resolve environmental conflicts in Canada. Globally there is a trend to promote ADR as an effective tool for the resolution of environmental disputes, countries have made legislative efforts to establish environmental mediation as a method of dispute resolution. Even though there is no guarantee that mediation would instantly resolve all environmental disputes, considering the method already used and the advantages of mediation as opposed to the traditional forms of adversarial dispute resolution, it is a viable method to resolve environmental disputes that arise from development.

It was also inferred that dispute resolution should accommodate ADR but should also be considered in relation to the broader framework of existing legislative and administrative processes. ADR methods should be embedded into the wider structures of environmental governance and participatory approaches to environmental dispute management. However, it was also opinioned that ADR in Environmental Dispute resolution cannot become a substitute for the formal adversarial methods of dispute resolution of litigation but could be an imperative supplementary method, which essentially would become a hybrid process of dispute resolution. ADR models could be formalized as Environmental Dispute Resolution method in Sri Lanka taking into consideration such existing models in countries like the United States and Canada as examples, and creating a localized model suitable for Sri Lanka. The techniques used in these countries range from consensual processes like mediation to quasi-adjudicative techniques such as arbitration.

5.3.4 Recommendations for Application of ADR in Environmental Dispute Resolution

Deducing from the research findings from primary sources, recommendations were made to introduce an Arbitration model consisting of a Statutory Tribunal which essentially would have the flexibility of a mediation but would be an enacted by statute. This is substantiated by the existence of such in in the countries focused in this research. It was suggested that this model could be a quasi – adjudicative method, where an arbitrator can be appointed by a State authority, and the statute could set out the qualifications of that person who would be competent in the subject of environmental law and is empowered to hear such matters before him/her. This was in line with the opinioned that ADR in Environmental Dispute resolution cannot become a substitute for the formal adversarial methods of dispute resolution of litigation but could be an imperative supplementary method, which essentially would become a hybrid process of dispute resolution. Such methods should be embedded into the wider structures of environmental governance and participatory approaches to environmental dispute management. This will be further elaborated in the Recommendations section of this Chapter.

Another ADR model recommendation in the research findings was to introduce alternative dispute model of Mediation, which is a consensual process, as an environmental dispute resolution. The suggestion was to introduce environmental mediation at various strategic points in the project cycle of a development project. One of the features of this recommended model was to incorporate environmental mediation and dialogues as a necessary prerequisite to obtaining environmental clearances at the design phase. Similarly, to include such environmental mediation in the subsequent construction and operational phases as a prerequisite to renewals of permits and other licenses. This is slightly different to the already existing environmental considerations that are part of the development sector in Sri Lanka. It was inferred that while EIA reports are a prerequisite to being granted approval to proceed and require assessments of the impacts of the project on the environment before the project has entered its life cycle, that this was a one-time assessment which only predicts the impacts of the project rather than a continuous assessment of the impacts as the project rolls out. Therefore, it was suggested, that a mediation process incorporated into the project cycles could be beneficial for development to progress unhindered while dealing with environmental issues before they escalate into full blown environmental disputes.

5.4 Conclusions

In conclusion this research aimed to explore the application of Alternative Dispute Resolution (ADR) methods in resolving environmental disputes in Sri Lanka. The research focused on the disputes that arise in relation to development and the assumption that where there are disputes, there is also the requirement to find appropriate methods of resolving such disputes.

The study confirmed that there are a significant number of environmental issues faced by Sri Lanka and if left un-checked culminates into disputes. Environmental issues arising from development varied from degradation to pollution to habitat loss to exploitation of natural resources. One of the significant causes that emerged from the study is the non-adherence or the non-compliance, either intentional or not intentionally, of environmental safeguards in development activities. While there is a

need to continue to encourage the development sector to practice due diligence, it is just as important to resolve these disputes when they occur in a manner which doesn't hinder the progress of the country. Wherever the non-compliance is intentional, penalization should be mandatory and litigation has been the accepted form of dispute resolution. However, where non-compliance is not intentional and due to the lack of diligence on the part of the regulator, it would be unfair to have the relevant parties penalized for such failure due to lack of diligence on the part of the mandated authorities. In such situations, litigation would prove to be a long and expensive form of resolution where the party in question stands to face economic loss unfairly. This study showed that in Sri Lanka, disputes that are environment related are brought before Court, either in the form of Public Nuisance cases, Fundamental Rights cases or Writ Applications. However, due to the laws delays, high costs and results in the impeding of development, the need to resolve environment related disputes in a most cost effective and efficient manner is essential. While the main form of environment related dispute resolution in Sri Lanka is litigation, there is a requirement to find ADR methods to prevent the Judiciary being pressured to make decisions based on the need and priority of the development projects.

The study also showed that there are no logical barriers to the possibility of applying Alternative Dispute Resolutions (ADR) to resolve environmental disputes in Sri Lanka. Since environmental disputes are quite site specific, the resolution of these should be flexible as much as possible to invoke the results that benefit both the development and environment. The application of non-adversarial dispute resolution methods in environmental dispute resolution has been successful for decades in other countries such as the USA and Canada and globally there is a trend to promote ADR as an effective tool for the resolution of environmental disputes. These countries have made legislative efforts to establish environmental mediation as a method of dispute resolution. Even though there is no guarantee that mediation would instantly resolve all environmental disputes, considering the method already used and the advantages of mediation as opposed to the traditional forms of adversarial dispute resolution, it is a viable method to resolve environmental disputes that arise from development. The researcher having re-examined the research objectives formulated at the beginning of

the study (repeated in section 5.2). Reviewing the data presented and analyzed in chapter 4, and the conclusions and recommendations of chapter 5, it is concluded that the researcher's objectives had been achieved.

5.5 Recommendations

This study makes the following recommendations based on the findings of the research.

5.5.1 Introduction of a Statutory Tribunal as a Hybrid model for Environmental Dispute Resolution (EDR)

ADR in Environmental Dispute resolution need not become a substitute for the formal adversarial methods of dispute resolution but could be an imperative supplementary method, which essentially would become a hybrid process of dispute resolution.

Therefore, recommendation is made to introduce an arbitration model consisting of a Statutory Tribunal which would be an enacted by statute. This model can be formed where an arbitrator can be appointed by a State authority, and the statute could set out the qualifications of that person who would be competent in the subject of environmental law and is empowered to hear such matters before him/her. This Statutory Tribunal would essentially have the flexibility of a mediation model but would be enacted by a Statute of law.

Arbitrator: The arbitrator could be appointed by a Council set up as a State authority. The arbitrator could be an expert in the area of environmental law (e.g. A former judge, Senior Litigator or a Senior Practitioner etc. with a number of years of experience in the area of environmental law and practice and/or related fields).

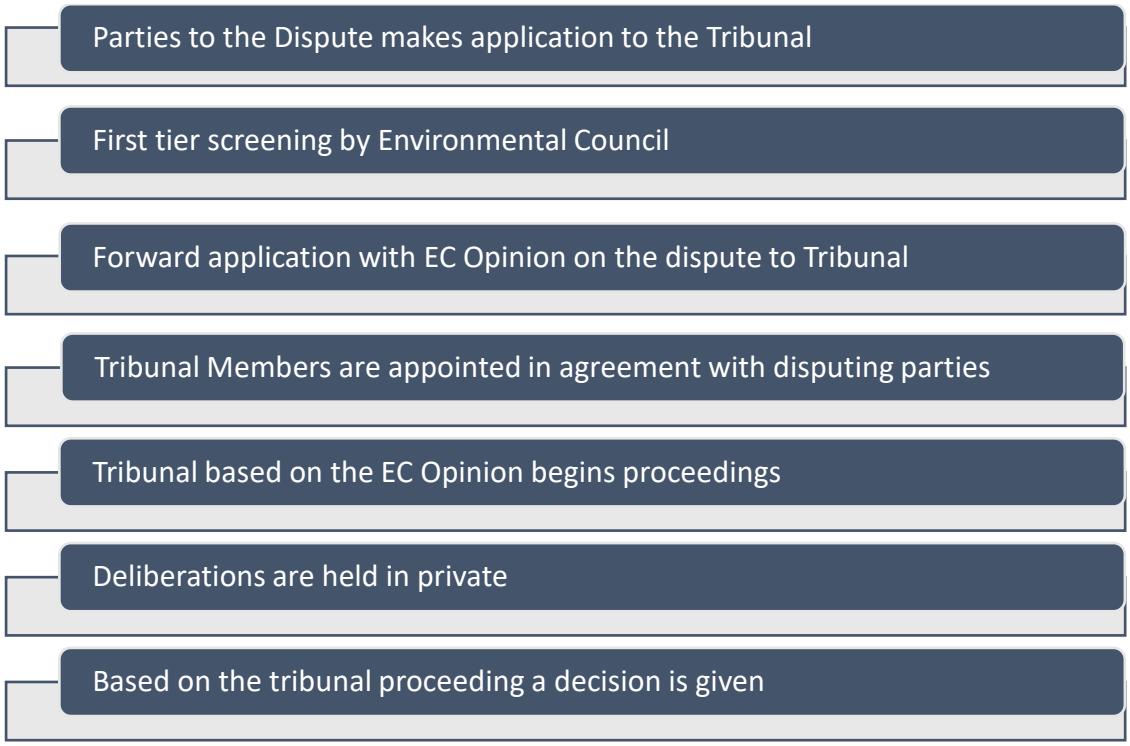
Council: The Council would be a combination of various experts and practitioners of the field (such as experts of environmental law, construction section, environmental economists and environmental conservationists) and

Statute: The Statute could set out the qualifications of those who would be competent in the subject of environmental law and is empowered to hear such matters before them.

The advantage of bringing this as a statutory model is as this could help reduce the large number of environment related issues going before the Supreme Court and Court of Appeal. These two Court would discourage an application to these courts, if there is an alternative remedy.

If the Statute can provide for an alternative remedy, then cases relating to environmental matters can be directed to this alternative method. Although there is no such model available in the existing dispute resolution system in Sri Lanka, this is a practical alternative dispute resolution model which can be introduced. If the statute can provide for an alternative remedy, then cases relating to environmental matters can be directed to this alternative method. This is beneficial even in a situation where the matter still is brought before a court of law, the Court will be aided by the proceedings of and the decision taken by the Tribunal by a panel who is conversant with the subject. Figure 1 given below illustrates the structure of the process that is recommended.

Figure 1: EDR Model as a Statutory Tribunal

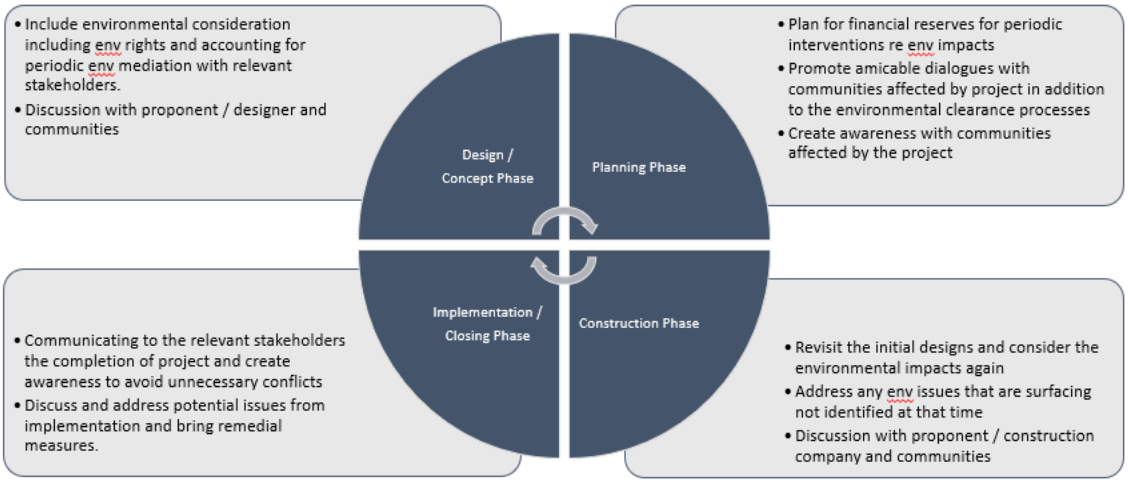


5.5.2 Introduction of an Environmental Mediation Model into the Project Cycle

Recommendation is made to introduce an Environmental Dispute Resolution (EDR) method of Mediation as a non-adversarial alternative dispute resolution method in Sri Lanka. This alternative model could be introduced at various strategic points in the project cycle of a development project.

One of the features of this recommended model is to incorporate environmental mediation and dialogues as a necessary prerequisite to obtaining environmental clearances at the design phase. Similarly, to include such environmental mediation in the subsequent construction and operational phases as a prerequisite to renewals of permits and other licenses. Figure 2 depicts the process for the incorporation of this model into the strategic points in the project cycle.

Figure 2: Environmental Mediation Model



For this recommendation, it is further recommended to introduce a form of Environmental Mediation as a mandatory process in establishing environmental clearances for the development project. The recommendation is proposed to incorporate the process of Environmental Mediation at strategic points in a Project Cycle of any development project.

This means incorporating Environmental Mediation in the form of;

- Discussion between the potential developer and the designers of the project and the people who would potentially be affected by the project at the Design Phase of the project as a prerequisite to obtaining environmental clearances from any of the mandated authorities,
- Discussion between the developer, the constructor company and the people who would potentially be affected by the project, at the Construction Phase of the project and
- Discussion and addressing of potential environmental issues that would arise from the implementation/operationalizing of the development project in bringing remedial measure in the event such an issue arises. This is to be incorporated at the Implementation / Operational Phase of the project

These steps would help prevent environmental related disputes from arising long before the project has begun to be implemented and thus preventing disputes while also preventing the incurring of extensive delays in time and costs by the project developers.

These are the recommendations made based on the research findings to facilitate the application of Alternative Dispute Resolution (ADR) methods for the settlement of environmental disputes in Sri Lanka.

5.6 Limitations of the Research

The intent of this research is to determine whether Alternative Dispute Resolution (ADR) methods can be engaged to settle environmental disputes arising from development in Sri Lanka.

Therefore, this study is limited to the disputes in relation to the environment and does not explore the various other disputes that would potentially arise in development not does this research explore the environmental disputes that arise from other causes such as climate change etc. Also, this research did not explore the consideration of imposing

environmental safeguards to prevent environmental disputes and focused only on disputes that have already come into the resolution processes.

5.7 Summary

Environmental disputes take the form of both private or public interest and those environmental disputes which are of private interest relates to damage to a group or individual's person or property resulting from a development activity which was causes environmental damage. In contrast environmental disputed which are of public interest arises from the impacts of a development activity causing environmental damage on the "public" right to clean and healthy environment. In both categories of environmental disputes, the environmentally damaging activity or the development activity itself is the cause of the dispute and thus needs to be addressed in kind. However, if during the dispute resolution the matter if the concerned activity itself is left unchecked, the severity of the damage may eventually result in the loss of essential environmental utilities which are central to the functions of ecosystems providing us human ecosystem services. With majority of the environmental disputes taking the form of public interest, these matters are most often resolved in a Court discussed in this research. These issues are quite site specific and the resolution of these should be flexible as much as possible to invoke the results that benefit both the development and environment. It is the view of this research that dispute resolution can accommodate the alternative approaches in so much as they are considered in relation to the broader framework of existing legislative and administrative processes. ADR model could be formalized as an Environmental Dispute Resolution method in Sri Lanka taking the existing such models in countries like the United States, Canada and many other countries, as examples and creating a localized model suitable for Sri Lanka as long as such methods should be embedded into the wider structures of environmental governance and participatory approaches to environmental dispute management.

6.0 List of Cases

1. *Abdul Thasim v Edmond Rodrigo*, (1947) 48 NLR 121.
2. *Al Haj M.T.M.Ashik v R.P.S. Bandula, OIC Weligama* (Noise Pollution Case), S.C.F.R. No.38/2005 decided on 09.11.2007.
3. *Appeal under Section 23E of the National Environmental Act by E.M.S. Niyas*, (1995) 2 S.A.E.L.R. 1.
4. *Bulankulama and six others v Ministry of Industrial Development and seven others* (Eppawala case), S.C. Application No. 884/99 (F/R).
5. *Environmental Foundation Limited v Attorney General* (Nawimana Case) S. C. Application No. 128/91; D/-11-12-1992: (1994), 1 (1) S.A.E.L.R. 17. Retrieved from *Judges & environmental Law: A Hand Book for the Sri Lankan Judiciary* (2009).
6. *Environmental Foundation Limited v The Land Commissioner* (CA Application No 573/1992).
7. *Environmental Foundation Limited v Urban Development Authority of Sri Lanka and Others (Galle Face Green Case)*, SC (F.R.) Application No. 47/2004.
8. *Geethani Wijesinghe v Hon. Patali Champika Ranawake, Minister of Environment and Natural Resources* (Air Pollution Case), S.C.F.R. No.87/2007.
9. *Gunaratne v Homagama Pradeshiya Sabha* (1998), 2 Sri. L.R. 11.
10. *Heather Therese Mundy v Central Environmental Authority*, S.C. Appeal 58/2003, S.C. Minutes 20.01.2004.
11. *Hettiarachchige Don Chrishan Priyadarshana Wijewardena v Geological Surveys and Mines Bureau* (Sand Mining Case), S.C.F.R. No.81/2004.
12. *Marsalin Siril Alexander and three others v Ceylon Electricity Board and eight others*, SC (FR) 282/16.
13. *Nakkuda Ali v Jayarathne*, (1950) 51 NLR 457.
14. *Sugathapala Mendis and other v C B Kumaratunga and others* (SCFR No 352/2007) (Water's Edge Case).
15. *S. M. Mubarak and seven others v Ceylon Electricity Board (CEB) and eight others* C.A.Writ Application No. 1112/2006.
16. *Wijesiri v Siriwardene* (1982) 1 SLR 171

7.0 References

Abraham, C. (1999). *Environmental jurisprudence in India*. Hague: Kluwer Law International.

Ahsan, I, & Bueta G., (2014) '*Proceedings of The Third South Asia Judicial Roundtable on Environmental Justice for Sustainable Green Development'* (Asian Development Bank 2014) Accessed 12 February 2020.

Amaeshi, U.F. (2008). Integrating organizational culture and knowledge management models for organizational effectiveness. *Journal of Management Sciences*, Vol 1, No.1, p. 285, Onitsha, Nigeria.

Andersson, M., Bennekou, G. & Schroll, H. (1992) Environmental problems and environmental regulations in Western Europe, 1980–1989. *Environmental Management* 16, 187–194 (1992). https://doi.org/10.1007/BF02393824. Accessed on June 22 2020.

Argyrous, G. (2009) *Evidence for policy and decision-making*; UNSW Press: Sydney.

Bakshi, P.M., (1990) "Conciliation for Resolving Commercial Disputes", *1 Comp. L.J.* (Journal) 19.

Bell, J. (2005) *Doing Your Research Projec*t, Berkshire: Open University Press/McGraw-Hill Education.

Bell, S., McGillivray, D., & Pedersen, O. (2013). *Environmental law*. Oxford: Oxford University Press.

Bingham G. (1986) *Resolving Environmental Disputes: A decade of experience*. The Conservation Foundation, Washington D.C. 1-12.

Bingham, G., & Haygood, L. V. (1986) "Environmental Dispute Resolution: The First Ten Years" 41:4 *Arb. J.* 3 at 4.

Bob, Urmilla., Bronkhorst, Salomé (2010)., Environmental conflicts: Key issues and management implications, *African Journal on Conflict Resolution*, Vol 10, No.2.

Broder D.S. (1979) The Unnecessary Evil of Special-Interest Groups, Boston Sunday Globe at *AI; Single-Issue Lobbies Create Woes, Milwaukee Journal*, October 7, 1979 at 17.

Brown, H. J., & Marriott, A.L. (1992) *ADR Principles and Practice*, 2nd ed., London: Sweet & Maxwell. p2.

Brundtland, G. (1987) *Report of the World Commission on Environment and Development: Our Common Future.*

Bryman.A (2008) 3rd Ed. *Social Research Methods*, Oxford University Press, London.

Burgess, G., & Burgess, H (1995) '*Beyond the limits; Dispute resolution of intractable environmental conflicts*', in: Blackburn, J.W., & Bruce, W.M. (eds), *Mediating environmental conflicts; Theory and practice*, pp. 101-20. Westport, CT: Quorum Books.

Burton, J. (1990) *Conflict: Resolution and Prevention*. New York: St Martin's Press.

Canadian Environmental Law Association (CELA) ref *the Friends of Oldman River Society v. Canada (Minister of Transport), [1990]* 1 F.C. 248 (T.D.) in Shrybman, S. (1984) Environmental Mediation B Theory to Practice Vol. 4 of *CELA's Environmental Mediation - Theory to Practice*.

Castro, A.P. and E. Nielson (2003) Natural *resource conflict management case studies: An analysis of power, participation and protected areas*. Rome, Food and Agriculture Organization (FAO).

Carvalho D.S. and Fidélis T. (2011) 'Citizen complaints as a new source of information for local environmental governance', *Management of Environmental Quality: An International Journal*, 22(3): 386 – 400.

Centre for Dispute Resolution (CEDIRES) https://cedires.com/hybrid-adr-mechanisms/ Accessed on June 12 2020.

Chabukdhara, M., & A., Nema, (2012) Heavy Metals Assessment in Urban Soil around Industrial Clusters in Ghaziabad, India: *Probabilistic Health Risk Approach. Ecotoxicology and environmental safety*. 87. 10.1016/j.ecoenv.2012.08.032.

Chabukdhara, M., Munjal, A., Nema, A.K., Gupta, S.K., & Kaushal, R.K. (2016). Heavy metal contamination in vegetables grown around peri-urban and urban-industrial clusters in Ghaziabad, India. *Human and Ecological Risk Assessment: An International Journal, 22*, 736 - 752. doi:10.1080/10807039.2015.1105723. ISSN 1080-7039.

Chandrappa, Ramesha., & Ravi. D.R. (2009) *Environmental Issues, Law and Technology – An Indian Perspective.* Research India Publication, Delhi, 2009, ISBN 978-81-904362-5-0

Corbin, J. & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.

Crowfoot, J. E., & Wondolleck, J.M. (1990) "Environmental Dispute Settlement," *in Environmental Disputes: Community Involvement in Conflict Resolution*, ed. James E. Crowfoot and Julia M. Wondolleck (Island Press), p17.

De Silva, S., Sachindrani, M., Bogahawatte, I. (2015). *The contradiction between sustainable development and economic development: Special reference to the Colombo Port City project of Sri Lanka*. http://www.kdu.ac.lk/proceedings/irc2015/2015/law-033.pdf Accessed on July 02 2020.

Divan, S., & Rosencranz, A. (2001) *Environmental law and policy in India*. New Delhi: Oxford University Press.

Dispute. (n.d.) *West's Encyclopedia of American Law, edition 2*. (2008). https://legal-dictionary.thefreedictionary.com/Dispute Accessed on July 15 2020.

DMC and UNDP. (2009). '*Sri Lanka National Report on Disaster Risk, Poverty and Human Development Relationship'*, Disaster Management Centre, Colombo, Sri Lanka and United Nations Development Programme, Bangkok, Thailand.

Dong Y., Ishikawa M., Hamori S. & Liu X. (2011) The determinants of citizen complaints on environmental pollution: An empirical study from China. *Journal of Cleaner Production*, 19: 1306-1314.

Environmental Foundation Ltd, (2009) *Judges & environmental Law: A Hand Book for the Sri Lankan Judiciary*. Published: Environmental Foundation Ltd.

Environmental Foundation Ltd, (2018) *Your Environmental Rights and Responsibilities: A Hand Book for Sri Lanka*. Published: Environmental Foundation Ltd.

European Commission list of environmental infringement cases https://ec.europa.eu/environment/legal/law/press_en.htm Accessed on June 15 2020.

European Environment Agency (EEP) https://www.eea.europa.eu/publications/92-827-5122-8/page014.html Accessed on June 15 2020.

Felsteiner, W., Abel, R., & A. Sarat. (1980) 'The emergence and transformation of disputes; Naming, claiming and blaming', *Law and Society Review* 15:631-54.

Foster, C. H. W. (1969) '*A case for environmental conciliation'* paper presented at the annual meeting of the American Institute of Biological Sciences.

Gannon, F., (2005). *Biotech, the environment and the three Ps.* (online). The European Molecular Biology Organization. Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1369101/ Accessed on June 12 2020.

Goldberg, S.G., Frank, E.A, N.H. Rogers. (1992); *Dispute Resolution: Negotiation, Mediation, and Other Processes*, (2nd ed.) (Boston: Little, Brown and Company) at 3.

Goonetilleke, R. (2014) Public interest litigation: a species of direct democracy and good governance. *Sri Lanka Journal of Development Administration*, 4, pp.83–96. DOI: http://doi.org/10.4038/sljda.v4i0.7116 Accessed on June 15 2020.

Halsbury's *Laws of England* (1991) Butterworths, London, 4th Edn., (2) 502.

Hamner S, Tripathi A, Mishra RK, et al. (2006) The role of water use patterns and sewage pollution in incidence of water-borne/enteric diseases along the Ganges river in Varanasi, India. *Int J Environ Health Res*. 2006;16(2):113-132. doi:10.1080/09603120500538226.

Harvard Law School Program on Negotiation: https://www.pon.harvard.edu/tag/dispute-resolution/ Accessed on June 20, 2020.

Hoffman, H.C.H., Rowe, G.C, Turk, A.H., (2011) *Administrative Law and policy of the EU*, Oxford University press. p.190.

Holder, J., (2004), *Environmental Assessment: The Regulation of Decision Making*, Oxford University Press, New York; F*or a comparative discussion of the elements of various domestic EIA systems,* see Christopher Wood *Environmental Impact Assessment: A Comparative Review* (2 ed, Prentice Hall, Harlow, 2002).

Horowitz, D. (1977) The Courts And Social Policy; Leventhal, Environmental Decision making and the Role of the Courts, 122 U. PA. L. REV. 509 (1974); Cramton & Boyer, *Citizen Suits in the Environmental Field: Peril or Promise*? 2 ECOL. L. Q. 407 (1972).

Howitt, D. (2010) *Introduction to Qualitative Methods in Psychology*. Essex: Pearson Education Limited.

Hupp, R. C., & Tatum, J. L. (2018) Ch. 19 Alternative Dispute Resolution, *STATE BAR OF MICH.* http://connect.michbar.org/envlaw/reports/deskbook/chapter19#_Toc291749995 Accessed 20 June 2020.

Illankoon, I. M. C. S., Tam, V. W. Y., Le, K. N., & Ranadewa, K. A. T. O. (2019) Causes of disputes, factors affecting dispute resolution and effective alternative dispute resolution for Sri Lankan construction industry, *International Journal of Construction Management*, DOI: 10.1080/15623599.2019.1616415.

India: Country Strategy paper, 2007–2013 (PDF). European External Action Service,

European Union. 2007. http://www.eeas.europa.eu/archives/docs/india/csp/07_13_en.pdf Accessed on June 20 2020.

International Labour Organization (ILO) Labour Legislation Guidelines https://www.ilo.org/legacy/english/dialogue/ifpdial/llg/noframes/ch4.htm#8 Accessed on June 22 2020.

International Union for Conservation of Nature and Natural Resources, 1980. *World Conservation Strategy: Living Resource Conservation for Sustainable Development* (PDF). Retrieved by http://www.a21italy.it/medias/31C2D26FD81B0D40.pdf

Kandlikar, Milind & Ramachandran, Gurumurthy. (2000) The causes and consequences of particulate air pollution in urban India: A synthesis of the science. *Annual Review of Energy and The Environment* - ANNU REV ENERG ENVIRON. 25. 629-684. 10.1146/annurev.energy.25.1.629

Lawson, E. (2019) Three Environmental Issues and Ways to Combat Them (Environmental Protection Online) https://eponline.com/Articles/2019/11/25/Three-Environmental-Issues-and-Ways-to-Combat-Them.aspx?p=1 Accessed on June 15 2020.

Lieberman, Jethro K.; Henry, James F. (21/1986). "Lessons from the Alternative Dispute Resolution Movement". *The University of Chicago Law Review*. 53 (2): 424. doi:10.2307/1599646. JSTOR 1599646.

Lincoln, YS. & Guba, EG. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications.

Lee J.C. (2008) '*Pollute first, control later' No more: Combating Environmental*

degradation in China through an approach based in Public interest litigation and public participation. Pacific Rim Law & Policy Journal Association, 7(3): 795–823.

Liang M. (2012), *Pollution Severity, Alternative Judicial Channels, and Citizens' Environmental Complaints: Evidence from Chinese Provinces*. Paper prepared for the 3rd Global Forum of Chinese Scholars in Public Administration, Shandong University, Jinan, June 1-3, 2012.

Macduff, Ian. (2016) Essays on mediation: Dealing with disputes in the 21st century. *Research Collection School of Law*. https://ink.library.smu.edu.sg/sol_research/1926 Accessed on June 20 2020.

Mathers, J. (1995) *Sandspit Small Craft Harbor Mediation Process: A Review and Evaluation* Ottawa: Supply and Services Canada.

Mcintyre, A. and Reynolds, F. (2012) There's no apprenticeship for alzheimer's: the caring relationship when an older person experiencing dementia falls. *Ageing and Society 32* (5): 873-896. DOI:10.1017/S0144686X11000699.

Melling, T. (1995) *Bruce Babbitt's Use of Governmental Dispute Resolution: A Mid Term Report Card* 30 Land &Water L. Rev. 57.

MERE. (2002). '*National action programme for combating land degradation in Sri Lanka'*, Ministry of Environment and Renewable Energy, Colombo, Sri Lanka.

MENR, MERE and UNEP. (2009). '*Sri Lanka Environment Outlook'*, Ministry of Environment & Renewable Energy and Renewable Energy and United Nations Environmental Programme, Colombo, Sri Lanka.

Moules, R. (2011). *Environmental judicial review*. Oxford: Hart Publishers.

Neslen, A. (2018) https://www.theguardian.com/environment/2018/sep/11/air-pollution-is-biggest-environmental-health-risk-in-europe Accessed on July 02 2020.

Nowakowski, P.T. (2009). *Cases involving cultic group infiltration into educational institutions in Poland: Preventive aspects.* Journal of Educational Review, Vol.1, 1-2, p.44, New-Delhi, India: Serials Publications.

Nwakoby, G.C. (2007). *The choice of place of arbitration: The issue of applicable law*. UNIZIK Law Journal, Vol. 6, No.1, p.1, Awka, Nigeria: Iyke Ventures Production, Faculty of Law, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria.

Oguntoke, O. and Annegarn, H. J. (2014) *'Effectiveness of mediation in the resolution of environmental complaints against the activities of gold mining industries in the Witwatersrand region'*, 24 (2), pp. 17–23.

Park, Chris (2001) "The Environment: Principles and Applications", 2 edition, Routledge.

Potter, S. (2002) *Doing Postgraduate Research*, London: Sage.

Peterson, L. (1992) "The Promise of Mediated Settlements of Environmental Disputes: The Experience of EPA Region V" 17 *Colum. J . Envtl. L*. 327 at 338.

Rhodes, J. and Smith, J.A. (2010) 'The top of my head came off': an interpretative phenomenological analysis of the experience of depression. *Counselling Psychology Quarterly* 23 (4): 399-409. DOI:10.1080/09515070.2010.530484.

Ryan, Gemma. (2018). *Introduction to positivism, interpretivism and critical theory. Nurse Researcher*. 25. 14-20. 10.7748/nr.2018.e1466.

Sachs, Jeffrey D. (2015). *The Age of Sustainable Development*. New York: Columbia University Press. ISBN 9780231173155.

Sarantakos, S. (2013) *Social Research*, Basingstoke: Macmillan

Saunders, Mark & Lewis, P. & Thornhill, A. (2009). Understanding research philosophies and approaches. *Research Methods for Business Students.* 4. 106-135.

Sengupta and Pandey (2020) / National Crimes Records (2020) https://www.downtoearth.org.in/reviews/state-of-india-s-environment-2020-in-figures-e-book--71528 https://www.downtoearth.org.in/news/environment/environmental-crimes-india-may-take-upto-33-yrs-to-clear-case-backlog-says-report-71650 Accessed on June 28 2020.

Smith, Brett. (2019). Canada: Environmental Issues, Policies and Clean Technology. AZoCleantech. https://www.azocleantech.com/article.aspx?ArticleID=563. https://www.canada.ca/en/environment-climate-change/services/air-pollution/quality-environment-economy/issues.html Accessed on July 16 2020.

Smith, D. W. (2018) "Phenomenology", The Stanford Encyclopedia of Philosophy, Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/sum2018/entries/phenomenology/> https://plato.stanford.edu/entries/phenomenology/ Accessed on June 20 2020.

Smith, J.A. and Eatough, V. (2006) Interpretative phenomenological analysis. In G.M. Breakwell, S. Hammond, C. Fife-Schaw and J.A. Smith (eds.) *Research Methods in Psychology* 322-342, 3rd ed., London: Sage.

Smith, J.A. & Osborn, M. (2008) Interpretative phenomenological analysis. In J.A Smith (ed.) *Qualitative Psychology: A Practical Guide to Research Methods* 53-81, 2nd ed., London: Sage.

Smith, J.A. Flowers, P. and Larkin, M. (2009) *Interpretative Phenomenological Analysis: Theory, Method and Research*. London: Sage.

Smith, J.A. (2011) Evaluating the contribution of interpretative phenomenological analysis. *Health Psychology Review* 5 (1): 9-27. DOI:10.1080/17437199.2010.510659.

State Energy & Environmental Impact Center; https://www.law.nyu.edu/centers/state-impact Accessed June 27 2020.

Stewart, D. W., & Kamins, M. A. (1993). *Secondary research: Information sources and methods*. Newbury Park, CA: Sage.

Strauss, A. & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). London: Sage.

State Energy & Environmental Impact Center https://www.law.nyu.edu/centers/state-impact Accessed on June 29 2020.

Sushil, Snigdha & Batra, Vidya. (2006) Analysis of fly ash heavy metal content and disposal in three thermal power plants in India. Fuel. 85. 2676-2679. 10.1016/j.fuel.2006.04.031.

Susskind, L., & Weinstein, A. (1980) *Towards a Theory of Environmental Dispute Resolution*, 9 B.C. Envtl. Aff. L. Rev. 311, http://lawdigitalcommons.bc.edu/ealr/vol9/iss2/4 Accessed 15 June 2020

Susskind, L., & Secunda, J. (1998) "Environmental Conflict Resolution: The American Experience," in *Environmental Conflict Resolution*, ed. Christopher Napier (London: Cameron). p16.

Teacher, Law. (2013). Legal Research at Postgraduate Level Essay. https://www.lawteacher.net/free-law-essays/general-law/legal-research-essay.php?vref=1 Accessed June 25 2020.

The Sabin Center for Climate Change Law of the Columbia Law School http://climatecasechart.com/non-us-climate-change-litigation/?cn-reloaded=1 Accessed June 20 2020.

The Law Society of Upper Canada (1992) "Short Glossary of Dispute Resolution Terms" (Toronto) at 6.

Thilakarathna, K. A. A. N. (2019). Environmental Protection through Judicial Review: The Sri Lankan Experience. *Sabaragamuwa University Journal*, 17(1), 15. https://doi.org/10.4038/suslj.v17i1.7728. Accessed on June 25 2020.

Tockner, K., & Stanford, J. (2002) Riverine flood plains: Present state and future trends. *Environmental Conservation, 29*(3), 308-330. doi:10.1017/S037689290200022X

UNEP. (2008). 'South Asia Environment Outlook 2009', United Nations Environment Programme, Nairobi, Kenya

UNEP (2014). *Environmental Justice: Comparative Experiences in Legal Empowerment*. https://www.undp.org/content/undp/en/home/librarypage/democratic-governance/access_to_justiceandruleoflaw/environmental-justice---comparative-experiences.html Accessed on June 02 2020.

UN.2002. Global Challenge Global Opportunity: Trends in Sustainable Development. https://sustainabledevelopment.un.org/content/documents/critical_trends_report_2002.pdf Accessed on June 02 2020.

UNEP (2019). *Advancing Environmental Rights: What are Environmental Rights?* https://www.unenvironment.org/explore-topics/environmental-rights-and-governance/what-we-do/advancing-environmental-rights/what Accessed on June 02 2020.

UNEP (2002). *Environmental legislation and institutions in Sri Lanka*. Colombo: UNEP.

White, R.M., A. Fischer, K. Marshall, J.M.J. Travis, T.J. Webb, S. di Falco, S.M. Redpath, and E. van der Wal (2009). *Developing an integrated conceptual framework to understand biodiversity conflicts*. Land Use Policy, 26, pp. 242–253.

Willig, C. (2008) *Introducing Qualitative Research in Psychology*, 2nd ed., Berkshire: McGraw-Hill Open University Press.

Willis, J. W., (2007). *Foundations of Qualitative Research: Interpretive and Critical Approaches*. London: Sage.

Wilson, A. (2015) *A Guide to Phenomenological Research*. Nursing Standard. 29(34):38-43.

Wimalachandra, L. K., (2007) *Alternative Methods of Dispute Resolution*. Junior Bar Law Journal, Vol. 2&3

Winchester, H. P. M. (1999) ‘Interviews and Questionnaires as Mixed Methods in Population Geography: The Case of Lone Fathers in Newcastle, Australia’, *The Professional Geographer*, 51: 1, 60 — 67 DOI: 10.1111/0033-0124.00145 URL: http://dx.doi.org/10.1111/0033-0124.00145.

Yasmi, Y., H. Schanz and A. Salim (2006). *Manifestation of conflict escalation in natural resource management.* Environmental Science and Policy, 9, pp. 538–546.

Yeke, Yıldız. (2015). A View towards Law with Respect to Phenomenology of Edmund Husserl. *Beytulhikme An International Journal of Philosophy*. 5. 31. 10.18491/bijop.42800.

Zubair, Lareef (2001). "*Challenges for environmental impact assessment in Sri Lanka".* Environmental Impact Assessment Review. 21 (5): 469–478. doi:10.1016/S0195-9255(01)00081-6. ISSN 0195-9255.

8.0 Annexures

Appendix I – Interview Guidelines

INTRODUCTION

The information gathered over this interview will only be used as a mean of fulfilling the requirement of the Dissertation for the Masters of Science Degree Programme of the University of Moratuwa.

In each of the interviewees who involve in a routine that bears a significant relevancy to the area of the research will be focused. Interviewees will be selected from top management and executive levels. According to the nature of the research the number of interviewees cannot be exactly mention. According to the nature of the research, the interview guideline was divided to four parts;

i) Identifying Environmental Disputes,

ii) Effectiveness of Dispute Resolution in Sri Lanka,

iii) Application of ADR Methods in Environmental Dispute Resolution in Sri Lanka.

iv) Recommendation to Improve Environmental Disputes Resolution in Sri Lanka

Given below is the structure of the interview guide line.

1. General information
2. Issues that give rise to environmental disputes in development projects in Sri Lanka
3. The effectiveness of dispute resolution methods used in Sri Lanka in settling such issues/disputes
4. The application of ADR dispute resolution for environmental issues in Sri Lanka

   The interview guide line has been developed as below, over the above major headings.

Organization: …….

Designation: ……

Date: ……

Duration of the Interview: 40 minutes

INTERVIEW TRANSCRIPT

1. In your opinion, what are the environmental issues that occur during the construction and operational stage of large-scale development projects?

2. What dispute resolution methods are used in Sri Lanka most in attempting to rectify these disputes?
    a. What dispute resolution method is the **most used**?
    b. Why do you think this method is preferred? (Is it the most preferred or is it the only available method?)

3. What is your perception about litigation in environmental dispute resolution in Sri Lanka? (from the point of view of both the necessity of the development project and the protection of the environmental for the people)

4. Is the non-adversarial method of Alternative Dispute Resolution (ADR) methods used for environmental dispute resolution in Sri Lanka?
    i. If yes – how effective would you expect ADR is in resolving environmental disputes successfully (in the context of the disputes rising in development projects)
    ii. If no – why do you think such methods are not used to resolve environmental disputes as mentioned above – barriers such as lack of resources, empowerment or attitude etc.

5. What would you suggest for the improvement of current dispute resolution methods to be more effective?

Appendix II - Questionnaire Survey

To Study the Application of Alternative Dispute Resolution (ADR) Methods for Settlement of Environmental Disputes in Sri Lanka

Dear Sir/Madam;

Request for filling the Questionnaire

I am Gayani Hewawasan, a student of the University of Moratuwa, completing the Degree of Master of Science Project Management conducted by the Department of Building Economics Faculty of Architecture. I am currently engaged in the research component for dissertation on the topic of "A Study of the Application of Alternative Dispute Resolution (ADR) Methods for Settlement of Environmental Disputes in Sri Lanka".

I would be most grateful if you could please take 20-25 minutes of your valuable time to complete the attached questionnaire survey. The information gathered hereby will only be used for the completion of my research component to complete the MSc in Project Management and ensure your information will be treated with confidentiality. A response at your earliest convenience would be very much appreciated.

Thanking You,
Yours Sincerely

S. G. Hewawasan, *Attorney at Law*
Consultant – Environmental Law and Governance
International Union for Conservation of Nature and Natural Resources (IUCN)

Questionnaire Survey

INSTRUCTIONS

Please be kind enough to answer all the questions from your own experience or from your observations.

General Information

1. Name (optional) :
2. Designation :
3. Name of the organization employed to (Optional):
4. Type of your organization (please highlight the name if unable to tick the box)

☐Regulatory Authority ☐ Consultant ☐International Civil Service

☐Contractor ☐CSO ☐Academia

5. Your Field,

☐ Experts in Environmental Law/Legal Practitioner
☐ Experts/Practitioners in Environmental Conservation
☐ Activists in Environmental Conservation
☐ Experts in Government mandated with Environmental Conservation
☐ Experts in Development Sector

6. Years of experience in your field

☐ 0-5 Years ☐ 6-10 Years ☐ 11-15 Years

☐ 16-20 Years ☐ More than 20 Years

Please tick (√) on the level that you agree with following statements.

Rating of opinion	Level of Agreement
1	Strongly disagree
2	Disagree
3	Agree
4	Strongly Agree
5	Undecided

	LEVEL OF AGREEMENT	1	2	3	4	5
1	"Environmental impacts are given insufficient consideration by the regulatory authorities."					
2	"The impacts of the development projects on the expected benefits for the communities from the project causes environmental disputes"					
3	"Litigation (adversarial form) is the only form of environmental dispute resolution in Sri Lanka"					
4	"Alternative Dispute Resolution (ADR) is recognized as a dispute resolution method in environmental negotiations in Sri Lanka"					
5	"ADR is effective in settling environmental disputes in Sri Lanka"					
6	"ADR can be used during policy-making and planning or once disputes have crystallized over administrative decisions (e.g. permitting, licensing etc.), or even after disputes have entered adjudication (adversarial form)"					
7	"ADR is not a substitute for statutorily-mandated decision-making by regulatory authorities but should be a supplement to the formal decision making is required by law"					
8	"ADR should be created as a dispute handling system enabled by statute or regulation"					
9	"ADR should be a supplementary mechanism to formal adversarial system of dispute resolution such as litigation (a hybrid mechanism)"					
10	"ADR incorporated at rational points of the development project cycle is more effective in preventing environmental disputes."					